



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL: 7001 0320 0006 0176 5888  
RETURNED RECEIPT REQUEST

**DEC 16 2011**

Mr. Steven C. Kohl, Esq.  
Barrels, Inc. Group  
c/o Warner Norcross & Judd LLP  
2000 Town Center, Suite 2700  
Southfield, Michigan 48075

RE: Supplemental Notice of Self-Implementing PCB Cleanup  
Barrels, Inc. Site, 1300 Block of North Larch Street, Lansing, MI

Dear Mr. Kohl:

We have completed our review of the Supplemental Notice of Self-Implementing Polychlorinated Biphenyl (PCB) Cleanup report, prepared by Conestoga-Rovers and Associates (CRA) and dated November 4, 2011. The report outlines the results of samples collected since the time of preceding submittals, and references the various procedures and objectives for the cleanup and disposal of PCB Remediation Wastes at the site in accordance with the requirements of 40 CFR § 761.61(a). A prior approval letter dated February 22, 2001 was issued by U.S. EPA following our review of correspondence dated January 29, 2001, accompanying the original Draft Remedial Action Plan submitted by CRA on behalf of site ownership. The February 22, 2001 letter from EPA constituted a conditional approval of the proposed cleanup plan. In addition, a second approval letter dated March 21, 2005 was issued by the EPA following our review of a Draft Remedial Action Plan and Notice of Coordinated Approvals / Risk-Based PCB Cleanup, dated September 27, 2004. The March 21, 2005 letter from EPA constituted an approval for the risk-based cleanup objectives pursuant to 40 CFR § 761.61(c).

Both of the prior approvals specify that the remediation will be conducted in accordance with the requirements of 40 CFR § 761.61(a). Information in the most recent submittal identifies that additional PCB-impacted soils, in addition to PCB-impacted building materials, were identified subsequent to the two prior approvals and that these materials will continue to be handled as PCB Remediation Wastes for off-site disposal in accordance with 40 CFR § 761.61(a)(5)(i)(B). Following EPA's review of the November 4, 2011 Supplemental Notice of Self-Implementing PCB Cleanup, EPA believes that





conditions in the previous Agency approvals continue to apply to this notification, specifically:

1. The use of a risk based cleanup objective for total PCBs of 16 mg/kg (ppm), pursuant to 40 CFR § 761.61(c);
2. The use of a low occupancy deed restriction, as defined in 40 CFR § 761.3, is required to address residual PCB impacts that will remain in the soil at levels exceeding 1 ppm following remediation. Although a heavy industrial zoning restriction is currently in-place for a portion of the site, a deed restriction that limits occupancy in such areas to less than 6.7 hours per week will be necessary at the completion of cleanup activities, pursuant to 40 CFR § 761.61(a)(8). The deed notice must be recorded within 60 days of completion of the cleanup, and will notify any potential purchaser of the property in perpetuity that the land has been used for PCB remediation waste disposal and is restricted to use as a low occupancy area, in addition to identifying the applicable cleanup levels.
3. Cleanup verification sampling in accordance with 40 CFR § 761.61(a)(6) is required for all excavation sidewalls and bases at the completion of remediation, and should not exclude sampling from walls north, south and east of CT-1, and walls east of DD-3, since the prior characterization data cannot be used to demonstrate the completeness of remediation. Cleanup verification sampling in accordance with 40 CFR § 761 Subpart O will be used to document the completeness of remediation for each excavation.
4. Interim sampling during cleanup in accordance with 40 CFR § 761.61(a)(6) should be performed to document the completeness of remediation of bulk PCB remediation waste “hot spots” with PCBs  $\geq$  50 ppm, and confirm that these wastes have been adequately isolated from other waste streams with PCBs < 50 ppm for purposes of disposal. PCB “hot spots” are considered to be present near sampling locations 204, BH-DD-2, BH-DD-3, and BH-DS-9, in addition to SS-6A and SS-10 where PCB immunoassay results previously showed PCB levels exceeded 50 ppm, and subsequent analytical data confirmed the impacts.
5. Please submit any additional characterization sampling results for the delineation of impacts prior to initiating cleanup. PCB impacts > 50 ppm were identified at BH-DS-9 and BH-DD-3 and testing was performed, but analytical results were unavailable at the time of submittal of the November 4, 2011 document.

Please note that this approval does not relieve you from your duty to comply with applicable federal, state, and local requirements. In addition, please note that if you wish to make any changes to your notification, then you must submit your proposal in writing at least 14 calendar days prior to the proposed implementation of the change. A summary report that describes how you conducted the cleanup in accordance with the applicable regulatory requirements must also be submitted within 60 days after the completion of the cleanup. If you have any questions, please contact Joseph Kelly, the

Corrective Action Project Manager, by e-mail at [Kelly.Joseph@epa.gov](mailto:Kelly.Joseph@epa.gov) or by telephone at (312) 353-2111.

Sincerely,

A handwritten signature in black ink, appearing to read 'Peter Ramanauskas', with a stylized, flowing script.

Peter Ramanauskas  
Regional PCB Coordinator  
Reuse and Redmediation Branch  
Corrective Action Section 1  
Land and Chemicals Division

cc: Kim Sakowski, Michigan Department of Environmental Quality  
Robert Harris, Conestoga-Rovers & Associates  
Joseph Kelly, EPA Region 5



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

Rec'd

MAR 2 2005

REPLY TO THE ATTENTION OF:

MAR 21 2005

D-8J

Mr. Steven C. Kohl  
Howard & Howard Attys.  
39400 Woodward, Suite 101  
Bloomfield Hills, MI 48304

RE: Approval for Risk based Cleanup and Disposal of PCBs at the  
Barrels, Inc. Site, Lansing, Michigan

Dear Mr. Kohl:

This letter is being sent to you, as the legal counsel of the Barrels, Inc. PRP Group (PRP Group). The United States Environmental Protection Agency (U.S. EPA) hereby grants approval to the PRP Group, to clean up and dispose of PCBs at the former site of Barrels, Inc. located in the City of Lansing, Ingham County, Michigan.

The approval allows the residual PCBs to be left in place after the removal of the PCB contaminated soil having a concentration greater than 16 mg/kg (ppm) PCBs. The 16 ppm is a risk based cleanup criterion developed by the Michigan Department of Environmental Quality for an industrial land use category. This approval is granted in accordance with the Federal PCB regulations codified at 40 CFR § 761.61(c), under which the Regional Administrator may approve a method to dispose of PCB remediation waste if it is found that the method will not pose an unreasonable risk of injury to human health or the environment. The authority to grant such approvals in Region 5 has been delegated to the Director of the Waste, Pesticides and Toxics Division.

This approval is based on our determination that the cleanup level meets the standard for a low occupancy area and the use of an institutional control, such as a deed restriction to limit human exposure to the PCB contaminated soil, presents no unreasonable risk to human health and the environment. The site is located in the Heavy Industrial Zoning District of Lansing.

In granting this approval, we considered the information included and referenced in the letter of September 27, 2004 sent by Conestoga-Rovers and Associates on behalf of the PRP Group. We have determined that the information meets the specifications at 40 CFR § 716.619a)(3)(i).

All PCB cleanup activities shall be carried out in accordance with the procedures described in the Draft Remedial Action Plan dated September 27, 2004. Disposal of all remediation waste must be done in accordance with 40 CFR § 761.61(a)(6)(B). Upon completion of the excavation, the areas will be backfilled with clean fill and compacted. Any departure from the provisions of the September 27, 2004, Draft remedial Action Plan must receive prior written authorization from this office.

Within sixty days of completion of the approved removal activities, the PRP Group, CSX in particular, who holds the title to the property, shall record, in accordance with the state law, a notation on the deed to the property, or in some other instrument-of-title that is normally examined during a title search, that will notify any potential purchaser that the property has residual PCBs and is restricted for re-use as a low occupancy area. A low occupancy area is defined in 40 CFR 761.3. In addition, within ten days of recording the notice, the PRP Group shall submit to the U.S. EPA a copy of the amended deed, and a certification signed by the responsible corporate officer that he/she has recorded the notation on the deed as specified above.

This approval does not relieve the PRP Group from compliance with all Federal, state and local regulatory requirements, including the Federal PCB regulations at 40 CFR Part 761, and does not preclude the U.S. EPA from initiating any enforcement action, including an action seeking civil penalties for any violation.

Please call Priscilla Fonseca, of my staff, at (312) 886-1334, if you have any questions regarding this approval.

Sincerely,



Margaret M. Guerrero, Director  
Waste, Pesticides and Toxics Division

cc: Kimberly Sakowski, MDEQ  
Robert Harris, CRA ✓



File

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

FEB 22 2001

REPLY TO THE ATTENTION OF:

DT-8J

Mr. Renato Pasqualoni  
Conestoga-Rovers & Associates  
228 Matheson Blvd. E.  
Mississauga, Ontario  
Canada, L4Z1X1

Re: Notification for Self-Implementing PCB Cleanup for a localized area with PCB contamination at the Barrels, Inc. CERCLA Site in Lansing, Michigan.

Dear Mr. Pasqualoni:

Thank you for your letter of January 29, 2001, in which you submitted to the United States Environmental Protection Agency, on behalf of the Barrels, Inc. PRP Group, a notification for Self-Implementing PCB Cleanup for a localized area contaminated with PCBs at the Barrel, Inc. CERCLA Site in Lansing, Michigan.

You indicated in your letter that the Site is the subject of a CERCLA enforcement action led by the Michigan Department of Environmental Quality (MDEQ). We understand that the Self-Implementing PCB Cleanup is part of the Remedial Action Plan which will be submitted to MDEQ and that any comments we will provide will be addressed and included in the final Remedial Action Plan.

Based upon our review of the Self-Implementing PCB Cleanup and discussion of the draft Remedial Plan for the Site with Kim Sakowski of MDEQ, we are providing the following comments:

1)) Prior to soil removal, Barrel, Inc. PRP Group must determine the extent of contamination by taking additional samples around the PCB Hot Spot (DD-2). The Disposal Amendment define "cleanup site" as " the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of a cleanup of PCB remediation waste, regardless of whether the site was intended for management of waste."

2) The draft Remedial Action Plan indicated that the soil cuttings currently stored in drums at the site will be used to fill low areas underneath the proposed asphalt cover. We recommend that those soils be sampled for PCBs prior to being used as fill.

3) Sampling and analysis verification of self-implementing cleanup must be performed in accordance with Subpart O of the PCB regulations. The proposed five discrete soil samples to be collected for verification may not be representative of the side wall and bottom of the excavation.

4) The PCB concentration of the soil to be removed must be known prior to excavation. The soil is PCB remediation waste and it is regulated by its as-found concentration. The reason why the extent of contamination must be defined as stated in Comment #1, above, is to be able to isolate the soil containing greater than 50 ppm PCBs from the soil containing less than 50 ppm PCBs for the purpose of disposal. Sampling the excavated soil for PCBs is not allowed because of possible dilution. Disposal for PCB bulk remediation waste is described in 40 CFR Section 761.61(a)(5(ii) and (iii).

5) The requirements for storage of PCB bulk remediation waste on site are described in 40 CFR Section 761.61(c)(9), if there will be need for temporary storage during remediation..

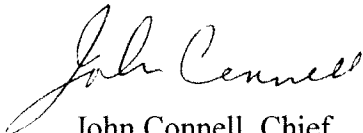
6) We have determined that the proposed cleanup level is acceptable. The site meets the definition for low occupancy area. For low occupancy area, the PCB regulations allow bulk PCB remediation wastes to remain at a cleanup site at concentrations  $>25$  ppm and  $\leq 100$  ppm provided the site is covered with a cap meeting the requirements described in 40 CFR Section 761.61(a)(7) and (8). Since this is a CERCLA Site and may require other cleanup standard, the more stringent one must be followed.

7) We defer the final language of the deed restriction and the review of the storm water design to MDEQ.

MDEQ must approve the final Remedial Action Plan, before Barrel, Inc. PRP Group can proceed with the removal of the PCB contaminated soil from the site.

If you have questions concerning this letter please call Priscilla Fonseca, of my staff, at (312) 886-1334.

Sincerely,



John Connell, Chief  
Toxics Program Section

cc: Kim Sakowski, MDEQ



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

OCT 19 2015

REPLY TO THE ATTENTION OF:

**CERTIFIED MAIL: 7011 1150 0000 2641 2425**  
**RETURNED RECEIPT REQUEST**

Mr. Stephen Kohl  
Warner Norcross & Judd, LLP  
2000 Town Center, Ste. 2700  
Southfield, Michigan 48075-1318

Re: Risk-Based PCB Cleanup and Disposal Approval - 40 CFR § 761.61(c)  
CSX Railroad Right of Way Parcel East of Barrels Superfund Site (MID017188673)  
Parcel Tax Identification Number: 33-01-01-09-281-001  
Lansing, Michigan

Dear Mr. Kohl:

This letter is in response to the Barrels, Inc. PRP Group submittal of an Application for Risk-Based PCB Cleanup for Off-Site Parcel, dated May 14, 2015, for proposed cleanup of Polychlorinated Biphenyls (PCBs) east of the former Barrels, Inc. site, located on the 1300 North Block of Larch Street, in Lansing, Michigan.

The Application describes a prior cleanup of PCB contamination on the Barrels, Inc. site, and PCB contamination that extends off-site from the Barrels, Inc. site onto the CSX Railroad Right of Way. The PCB contamination that remains in-place on the CSX Railroad Right of Way is the subject of this letter.

EPA previously granted conditional approvals for proposed cleanup on the Barrels, Inc. site on February 22, 2001 and March 21, 2005, and reaffirmed the prior approvals on December 16, 2011. On-site cleanup activities were completed in 2012, but the excavation extended onto the CSX Railroad Right of Way, and four confirmation samples collected along the east wall of excavations contained PCBs above the EPA-approved risk-based cleanup level of 16 parts per million (ppm). Residual PCB levels of 31 ppm, 51 ppm, 79 ppm, and 110 ppm were present in these four samples, however, further remediation of the PCB contamination could not be completed because of the potential to compromise the integrity of the railroad ballast and tracks. In accordance with the requirements of 40 CFR § 761.61(c), the intent of the Application is to request approval for a Risk-Based PCB Cleanup that defers the cleanup until a time when track maintenance allows for the cleanup of PCBs to be performed, and uses a Restrictive Covenant to minimize the potential for exposure in the interim, and ensures that proper procedures are followed when any of the future excavation/cleanup is performed.

At the request of EPA, following cleanup on the Barrels, Inc. site, soil sampling was performed to delineate the extent of PCB concentrations on the CSX Railroad Right of Way, and identify future cleanup requirements. Thirty-eight soil borings were installed in rows along the railroad tracks. Samples were analyzed from 17 of the 38 borings. Analytical results summarized in the Application show that Aroclor-1254 was identified at 85 ppm in only one of the samples analyzed, and the extent of PCB impacts extending from the former excavation walls to this sampling location (W 06) is delineated.

To address soil contamination exceeding the risk-based cleanup level of 16 ppm, and cleanup levels specified under 40 CFR § 761.61(a)(4)(i)(A), the Application includes a draft deed restriction that proposes land use restrictions and notifications that will be recorded against the deed to the property. These include: limiting the site use to low occupancy and requiring dermal protection for workers who exceed 6.7 hours per week in the area; prohibiting the installation of wells on the parcel unless approved by MDEQ or EPA; restricting access with a secured fence that is marked with a sign including the ML mark pursuant to 40 CFR § 761.61(a)(4)(i)(B)(2); preventing excavation in the affected area on the parcel unless performed by workers trained in accordance with OSHA 29 CFR Part 1910; and ensuring that proper handling, disposal, sampling, cleanup, reporting, and notification to MDEQ and EPA will be performed at the time when track maintenance or sale of the property provides for access to the PCB impacted materials for cleanup.

Following EPA's review of the May 14, 2015 Application for Risk-Based PCB Cleanup for Off-Site Parcel, EPA approves the Application under 40 CFR §761.61(c) subject to the following conditions. Specifically, CSX, on behalf of Barrels PRP Group:

1. will file a copy of the restrictive covenant submitted with the Application with the Ingham County recorder of deeds, as needed to limit the area of contamination to low occupancy use as defined in 40 CFR § 761.3, and address residual PCB impacts that will remain in the soil at levels >16 ppm until such time that remediation can be performed when CSX or future owners have access to the PCB contamination left in place, including but not limited to instances of track maintenance. The deed notice must be recorded within 60 days of the date of this letter, and will notify workers, owners, and/or any potential purchasers in perpetuity that the land has been used for PCB remediation waste disposal, is restricted to low occupancy use, and identify the applicable cleanup levels and requirements;
2. will provide EPA with a copy of the signed, certified, and recorded deed within 60 days after the recording;
3. must dispose of PCB contaminated soil that is excavated from the parcel in the future at a licensed TSCA disposal facility in accordance with 40 CFR §761.61(a)(5)(i)(B)(2)(iii) to meet the approved cleanup level of 16 ppm, unless a more detailed plan is submitted to EPA in accordance with 40 CFR §761.61(a) or §761.61(c) prior to disposal; and,



4. must demonstrate that future excavation/cleanup achieves the applicable cleanup criteria through confirmation sampling completed in accordance with Subpart O of EPA's PCB regulations.

Please note that this approval does not relieve you from your duty to comply with applicable federal, state, and local requirements. Any departure from the conditions of this approval or the provisions of the May 14, 2015, Application must receive prior written authorization from this office. All conditions of this approval and other applicable requirements of TSCA and its implementing regulations will continue to apply to the Site after any transfer in ownership.

If you have any questions, please contact Joseph Kelly, of my staff, by e-mail at [Kelly.Joseph@epa.gov](mailto:Kelly.Joseph@epa.gov) or by telephone at (312) 353-2111.

Sincerely,



*for* Margaret M. Guerriero  
Director  
Land and Chemicals Division

cc: Kim Sakowski, MDEQ  
Nell Tyner, Progressive Engineering & Construction, Inc.  
Dan Dyer, Manager - Environmental Remediation, CSX Transportation Inc., 31 E. Jordan  
Street, Indianapolis, IN 46204



**Application for Risk-Based  
PCB Cleanup for Off-Site Parcel**  
Barrels, Inc.  
Lansing, Michigan

May 14, 2015

Prepared by

PROGRESSIVE ENGINEERING & CONSTRUCTION, INC.  
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Tampa, Florida 33614  
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## **1. INTRODUCTION**

This report summarizes the response actions completed on behalf of the participating Potentially Responsible Party Group (PRP Group) for soils contaminated with polychlorinated biphenyl (PCB) compounds for an off-site parcel at the Barrels Inc. NPL Site (Site) located in Lansing, Michigan, namely the CSX Transportation, Inc. Right-of-Way (CSXT ROW). This report serves as the application/request for United States Environmental Protection Agency (USEPA) Region 5 approval of risk-based closure for that off-site parcel which, based upon the absence of a present risk and implementation of a restrictive covenant, allows PCB impacted soils to remain in place within the active CSXT ROW until such time as it becomes practical to complete remediation pursuant to the requirements of 40 CFR 761. Information in this report documents that the PCB-impacted soils at the affected CSXT ROW parcel have been adequately delineated and, coupled with the restrictive covenant limiting use of that parcel, ensures that protection of human health and the environment will be maintained until it is feasible to take further action to address PCB impacted soils within that CSXT ROW.

### **1.1 Background**

The Site is a 2.3-acre former drum reclamation facility located in an industrial part of the City of Lansing, Ingham County, Michigan (Figure 1). The Site is comprised of properties owned by CSX Transportation, Inc. (CSXT) (formerly Chesapeake & Ohio Railway Company) and parcels owned by Demmer Properties LLC (formerly held by the Michigan Land Bank Fast Track Authority). The southern portion of the Site was previously used as a coal yard by the Cahill Coal Company and the western portion of the Site was used by Cutler Oil Company/Gulf Refining Company presumably for the storage and distribution of petroleum products. The Site is bounded to the east by an active CSXT ROW. Figure 2 shows the parcels that comprise the Site.

Barrels Inc. operated a drum reclamation facility on the Site from 1961 until approximately 1980 when the property was abandoned. The drum reclamation process consisted of cleaning the drums in a caustic solution, and then rinsing, repairing, and repainting the drums for re-use. Surface soils were contaminated by spills that presumably occurred at the loading dock and drum storage areas and from a storage tank which contained the caustic cleaning solution.

In 1986, the Michigan Department of Natural Resources (MDNR) removed 1,000 drums, 1,000 cubic yards of contaminated soil (surface soils to a depth of approximately 6 inches), and nine underground petroleum storage tanks from the Site. All contaminated materials removed from the Site were transported to a federally-approved disposal facility. MDNR subsequently conducted shallow soil sampling in 1987 and confirmed that soils were impacted with metals, volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and cyanide.

## **1.2 Regulatory Framework**

The Site is being addressed as a State-lead CERCLA action under the direction of the Michigan Department of Environmental Quality (MDEQ, formerly MDNR) and the USEPA. Response activities at the site are governed by Part 201 of the State of Michigan Natural Resources and Environmental Protection Act (NREPA), MCL 324.20101 et seq. and the MDEQ's implementing regulations and 40 Code of Federal Regulations (CFR) Part 761 pursuant to the Toxic Substances Control Act of 1976 (TSCA), as amended (15 USC 2605(e)) for PCBs.

The USEPA proposed the Barrels, Inc. Site for the National Priorities List (NPL) in January 1987, and finalized the NPL listing in October 1989. The State of Michigan and the PRP Group entered into a Consent Decree on March 1, 1993, under Act 307 (now supplanted by Part 201), which called for the PRP Group to complete a Remedial Investigation and Feasibility Study (RI/FS) and to submit a Remedial Action Plan (RAP) for the Site.

## **1.3 Summary of Previous Investigations and Documents Submitted to MDEQ**

In 1995, remedial investigations were completed, and the MDEQ approved the Final RI Report (CRA, 1995). This was followed by completion of a feasibility study, for which the Final FS Report (CRA, 1996a) was completed and approved by MDEQ in 1996. A Draft RAP (CRA, 1996b) was also submitted in 1996, in which the selected remedy was excavation of PCB soil hot spots (>50 mg/kg total PCBs), cleaning of former process tanks, and removal/demolition of tanks and buildings to be followed by capping of the entire Site. The Draft RAP envisioned completing this remedy and achieving land-use-based closure pursuant to Part 201 of NREPA by deed restricting the properties comprising the Site for nonresidential land use only.

Subsequently, several revisions were made in response to comments from the MDEQ on the Draft RAP. In the intervening time period between 1996 and 2006 when the most recent RAP was submitted, the MDEQ determined that existing groundwater contamination not attributable to activities at the Site but to upgradient historical sources (MDEQ, 2009); therefore, the PRP Group would not necessarily be responsible under Part 201 for remediating the contamination migrating on-site from an upgradient source. In response, the PRP Group elected to modify the original selected remedial alternative, which was intended to protect against leaching of contaminants from soil to groundwater at the Site, and to include excavation and removal of all soils containing contaminants above appropriate cleanup target levels. The selected remedial alternative in the October 2006 Draft RAP (CRA, 2006) was based upon removal of impacted soils and restricting land use on the property to industrial (non-residential).

In 2010, because the Draft RAP had not yet been approved by the MDEQ, the PRP Group submitted an Interim Response Work Plan (CRA, 2010) designed to address the contamination at the Site through soil removal to concentrations that would not require capping for contaminant leaching and/or direct exposure to industrial workers. The interim response action (IRA) incorporated portions of the proposed RAP including removal of soils exceeding PCB cleanup levels and additional assessment and removal

of soils containing other contaminants to the lower of the default cleanup target levels or calculated site-specific background.

After additional soil assessment was completed in 2011, the areas proposed for excavation were expanded based upon the new data, and CRA initiated the IRA in 2012. A *Post-IRA Soil Conditions Report* (CRA, 2013), summarizing the IRA activities and results, was submitted to the MDEQ at its request. This report included information on both PCBs and other contaminants. Further documentation of the completion of cleanup for contaminants other than PCBs is not covered herein, but will be submitted to the MDEQ under separate cover.

#### **1.4 Summary of Previous Documents submitted to the USEPA**

Although the MDEQ has oversight of the cleanup of CERCLA hazardous constituents at the Site, the USEPA retained jurisdiction over the remediation of PCBs under 40 CFR 761. During the same time frame as the PRP Group was submitting plans and exchanging correspondence with the MDEQ, the PRP Group also submitted documents to the USEPA to address cleanup of the PCBs at the Site under 40 CFR 761.

On January 29, 2001, the original Draft RAP was submitted with correspondence to the USEPA, who granted conditional approval of the proposed cleanup plan on February 22, 2001 (USEPA, 2001). Subsequently, a Draft RAP and *Notice of Coordinated Approvals/Risk-based PCB Cleanup* document (dated September 27, 2004) was submitted and approved on March 21, 2005 (USEPA, 2005). Subsequently, a *Supplemental Notice of Self-Implementing PCB Cleanup* report (CRA, 2011) was submitted to the USEPA on November 4, 2011. USEPA responded with comments on December 16, 2011, confirming prior approvals with conditions and the risk-based cleanup objective of 16 mg/kg total PCBs for the Site (USEPA, 2011).

In 2012, after receiving USEPA approval to proceed with the self-implementing PCB cleanup actions, CRA completed the interim soil removal action as described in their *Interim Response Work Plan* (CRA, 2010), as modified pursuant to discussions with the MDEQ in February 2012. After the interim removal actions were completed, CRA submitted a summary of their actions to the MDEQ (CRA, 2013), but did not submit a copy to the USEPA.

Progressive Engineering & Construction, Inc. (Progressive) summarized the interim removal actions for PCBs completed by CRA in a *Completion of Self-Implementing PCB Cleanup* report, which was submitted to the USEPA on April 29, 2014 (Progressive, 2014). That report documented that all soils exceeding the PCB site-specific cleanup goal of 16 mg/kg had been removed from the Site, with some limited exceptions in the adjacent CSXT ROW. All of the soils containing PCBs above the site-specific cleanup goal of 16 mg/kg could not be removed from that off-site parcel due to their location under the ballast in the active CSXT ROW. USEPA requested additional delineation in that off-site parcel to define the full extent of PCBs in soils (within the CSXT ROW) exceeding the cleanup goal. The goals of the further investigation were to:

- Define the concentration gradient and extent of PCBs in soils in the ROW,
- Delineate the area of the ROW requiring land use restrictions,
- Verify the remaining soils only pose a direct contact exposure risk if excavated, and
- Provide the information needed to ensure that any future excavation of soil from beneath the ballast would be managed appropriately. The field work was completed in October 2014 and the results are summarized in this report.

## 2. AREAS OF CONCERN FOR PCBs

### Overview

Previous reports have been submitted that document the extent of PCB impact in soil including the RI (1995) and several subsequent investigations performed from 2002 through 2011 as described above. These investigations confirmed that PCB-impacted soils were most prevalent at shallow (0 – 2 ft) depths on-site (primarily east of the former Concrete Block building) and off-site in the drainage swale along the eastern boundary of the Site (Figure 3). In addition, a few discrete areas were identified where “hotspots” of soil containing PCBs greater than 50 mg/kg were present. Based upon all of the data gathered through 2011, the Site was divided into 26 sub-areas for the IRA based upon the contaminants and concentrations present (CRA, 2013). These areas are shown on Figure 3, with the yellow shaded areas representing areas of concern for PCBs. The areas of concern for PCBs (generally from north to south) include Areas B, D, E, F, G, H, Concrete Building, O, M, PVY, W, X and Z.

### Off-Site

With the exception of Areas E and O, all of these areas of concern are located on-site and were addressed under a *Notice of Self-Implementing PCB Cleanup* (CRA, 2011) approved by USEPA; and the *Completion of On-Site PCB Cleanup Report* (Progressive, 2015) has been provided separately for USEPA review/approval. Areas E and O are off-site and are collectively called the CSXT ROW parcel, which is the area of concern for which this *Application for Risk-Based PCB Cleanup for Off-Site Parcel* applies. Figure 4 depicts this off-site PCB area of concern.

Specific additional work completed to address the off-site Areas E and O included removal and confirmatory sampling in 2012, and further delineation in 2014, as described below:

- August 2012 - CRA performed a total of seven sidewall samples were obtained from 0 to 2 ft bgs along the edge of the excavations in Areas E and O. In Area E (and adjacent Area C), three of the four eastern sidewall samples obtained after excavation exceed 50 mg/kg total PCBs, and in Area O, one of the three eastern sidewall samples exceeded the site-specific cleanup goal of 16 mg/kg. In this area, the cleanup goals were not met in sidewalls, but no further excavation was possible due to the proximity to the rail line. Any additional excavation would have disturbed the railroad ballast and encroached upon the embankment supporting the tracks. Photographs taken during the swale excavations along the rail line showing the proximity to the ballast and tracks (those photos were presented in Figures 20 through 25 of the *Completion of Self-Implementing PCB Cleanup Report* [Progressive, 2014]). All excavations were backfilled with approved sand fill from a borrow pit. This work was documented in the *Post-IRA Soil Conditions Report* (CRA, 2013) and the *Completion of On-Site PCB Cleanup Report* (Progressive, 2015; Figures 6 and 12),



- October 2014 – Progressive completed further soil sampling to delineate PCBs in the CSXT ROW (Areas E and O) pursuant to USEPA's comments (e-mail dated July 17, 2014) on the *Completion of Self-Implementing PCB Cleanup Report* (Progressive, 2014). That work is described in Section 3 of this report.

### **3. OFF-SITE POST-EXCAVATION DELINEATION SAMPLES**

In response USEPA's comments (e-mail dated July 17, 2014) regarding the potential extent and concentrations of PCBs exceeding the cleanup goal in the CSXT ROW, additional soil samples were obtained by Progressive on October 14 and 15, 2014, adjacent to the former excavation Areas E and O. In order to minimize the possibility that the rail line would have to be closed down to rail traffic at any time in the future to collect additional investigative samples to complete delineation, three rows of samples were collected during one field effort: two rows on the outside of both tracks (west and east sides) and one row in between the two sets of tracks. The locations where samples were collected are shown on Figure 5. Figure 6 shows results of the analyses of the soil samples. Figure 7 shows the contours for soil PCB concentrations in the 0 – 2 ft interval. Figure 8 is a view of the tracks and the drilling rig sampling beneath the ballast on the west side; Figure 9 shows a view of sampling efforts between the sets of tracks.

The USEPA indicated that discrete samples should be obtained from equivalent sampling depths to the depths at which PCBs had exceeded the site-specific cleanup goal in the composite sidewall samples obtained after excavations were completed (by CRA in 2012) to the edge of the ballast. These sidewall samples reflected PCB-impacted soils not present at ground surface, but present beneath the ballast. In order to compensate for the possibility that the ground surface elevations might be higher on the tracks, soil samples were collected at intervals of 0 – 2 ft, 2 – 4 ft, and 4 – 6 ft bgs. All of the samples were sent to Fibertec Environmental Services, Inc. laboratory in Holt, Michigan for analysis of PCBs by EPA Method 8082.

Samples collected from 0 – 2 ft and 2 – 4 ft bgs from the 14 locations on the western side of the tracks adjacent to the excavation areas identified as Areas E and O were initially analyzed and preliminary results provided by the laboratory. Based upon those results, samples from these same depth intervals at three additional soil sampling locations were analyzed by the laboratory to complete delineation of the PCBs in soils to the cleanup objective of 16 mg/kg. The laboratory analyses are summarized in Tables 1 and 2.

Figure 7 shows the results of the analyses illustrating the area exceeding 16 mg/kg and the area representing 1 mg/kg of total PCBs for purposes of deed restriction. The restrictive covenant provided in Appendix A documents the surveyed boundaries of the (former Areas E and O) CSXT ROW parcel where low occupancy deed restrictions were implemented.

#### **4. OFF-SITE RISK EVALUATION**

All soils containing PCBs exceeding 16 mg/kg were excavated and removed from the Site with the exception of an area along the northeastern edge of the Site along the eastern side of removal Areas E and O (Figure 3), where soils were excavated to the edge of the CSXT ROW ballast and the embankment supporting the tracks. Further excavation without damaging or removing the tracks was physically infeasible.

The bottom samples obtained from the eastern side of excavated Areas E and O show that PCBs exceeding the cleanup standard only extended down to 2 feet bgs, as the bottom samples collected from 2.5 ft bgs met the cleanup standard (Progressive, 2014). The additional investigation of soils in the CSXT ROW shows that only a very limited area of soils containing PCBs above 16 mg/kg is still present in the upper 0 - 2 ft soil interval beneath the ballast directly adjacent to the western side of the tracks, and that the PCB concentrations decrease eastward as distance from the Site increases (Figures 6 and 7). These additional sampling results are consistent with the Site conceptual model that PCB contamination within the CSXT ROW is the result of limited surface migration of contaminants from the Site to the slight drainage swale between the Site fence line and the ROW tracks.

The design of the railroad bed construction, which is comprised of 1.5 – 2.0 ft of rock ballast overlying compacted sub-ballast and soils, provides sufficient assurance that remaining PCB-impacted soils do not present a potential pathway of exposure to the public and pose only negligible risk to railroad workers when excavation beneath the existing railroad ballast may be performed in this restricted area. In addition, provisions were included in the restrictive covenant (Appendix A) to ensure that the remedy remains protective into the future by ensuring that personnel trained in handling PCB-impacted materials will be present during excavation work, any workers that may be exposed to PCBs will wear appropriate personal protective equipment (PPE), and any PCB-impacted soils will be managed appropriately.

Because the soil sampling locations were not random across a potential exposure unit, but rather were based upon where contamination was anticipated to be greatest, a statistical approach to evaluating the results would not be appropriate. However, a simple calculation of the mean of the concentrations (using  $\frac{1}{2}$  detection limit for non-detects) from the 0 – 2 ft bgs sampling interval was only 5.3 mg/kg, well below the site-specific risk-based cleanup goal of 16 mg/kg. The mean of results from the 2 – 4 ft bgs interval would be even lower due to the larger number of non-detects. Thus, even without the protective barrier of the railroad ballast, the average value of PCBs in shallow soils in this area would not present an unacceptable risk to human health.

This supports the conclusion that the combination of restricting the CSXT ROW to nonresidential use, restricting a limited area to low occupancy use, and maintaining the physical barrier of the railroad bed and ballast is more than sufficient to be protective of human health via dermal, inhalation or ingestion pathways until such time that the area becomes accessible (e.g., during maintenance activities) and PCB cleanup can be completed.

## **5. WASTE DISPOSAL**

Investigation derived waste (IDW) resulting from the additional delineation soil sampling completed in October 2014, was containerized in two 55-gallon drums (one for soil cuttings and one for decontamination water) and characterized for disposal. The laboratory analyses indicate that the soils did not contain detectable PCBs, metals were below statewide background or residential cleanup goals, and VOCs were not detected; the decontamination water did not contain detectable PCBs or VOCs, and did not exceed any of the state tap water standards except for lead. The analyses demonstrated that the IDW was not hazardous, and were disposed of at an appropriately licensed disposal facility. Documentation of disposal is provided in Appendix B. Other waste disposal of soils from Areas E and O (by CRA in 2011, 2012) were accomplished as part of the IRA, and are documented in the *Completion of On-Site PCB Cleanup Report* (Progressive, 2015).

## 6. DATA VALIDATION AND USEABILITY REPORT

The laboratory data packages for the soil and waste samples collected during post-excavation confirmation sampling are provided in Appendix C and were evaluated as proposed in the Quality Assurance Project Plan (QAPP), which was presented as an appendix in the 2006 RAP (CRA, 2006). The following laboratory deliverables were evaluated for each laboratory report:

- Case narratives that include a summary of analytical methods used and a description of any unusual action or conditions;
- Summary of results and quantitation limits of all analyses;
- Dates of sample receipt, extraction/digestion and analysis;
- Method blank results;
- Surrogate compound recovery data, matrix spike/matrix spike duplicate recovery data, relative percent difference for duplicates and control limits, as applicable;
- Laboratory control/check sample data; and
- Executed chain-of-custody forms.

Data validation was based upon the applicable guidelines of the *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (EPA-540-R-08-01, June 2008)* and the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004, October 2004)*. The useability of the data to meet the project objectives was evaluated and summarized in the data validation report provided in Appendix D (Table D-1). No data qualifiers were necessary based upon review of the QC data.

The data met the project objective of demonstrating that soil analyses are representative of the environmental conditions remaining at the off-site CSXT ROW parcel and are sufficient to meet the cleanup goals of the project.

## **7. DEED RESTRICTIONS AND WARNING SIGNS**

The previous interim response action was performed with the objective of removing all soils that exceeded risk-based cleanup goals including PCBs and closing the Site (on- and off-site parcels) with deed restrictions (i.e., restrictive covenant) to prevent residential/unrestricted land use. The soil removal achieved the objectives for PCB-impacted soils within the Site and off-site, except for the limited area within the CSXT ROW where PCB-impacted soil remains exceeding the risk-based cleanup goal. That material is located below a portion of the track ballast where access is very limited by the presence of fencing on both sides of the rail lines and where the ballast serves as a physical barrier to prevent exposure to the underlying soils. The only potential exposure pathway would be to railroad maintenance workers if they are involved in excavations/maintenance beneath the ballast. The restrictive covenant for the off-site CSXT ROW parcel is provided in Appendix A and includes several limits on land use and provisions for protection of railroad maintenance works during future activities beneath the ballast. For example, there is a provision for ensuring that any excavations beneath the ballast in the restricted area will require personnel trained in handling PCB-impacted materials to be present during excavation work and use of appropriate PPE protocol to avoid unacceptable exposure to PCB-impacted soils in accordance with Occupational Safety and Health Administration (OSHA) Rule 29 CFR 1910. Provisions also are included for the proper excavation and disposal of the TSCA regulated soils and soils exceeding the site-specific cleanup goal should future maintenance or construction activities involve excavating or disturbing those soils below the ballast. In addition, the restrictive covenant requires installation (and maintenance) of warning signs along the fences adjacent to this restricted area to identify where PCB-impacted soils may be present.

In addition to restricting the CSXT ROW parcel to nonresidential land use, 40 CFR Part 761 requires that properties containing bulk PCB remediation waste cannot be designated as “high occupancy” areas without further conditions unless the concentration of PCBs is less than or equal to 1 mg/kg. Because the site-specific cleanup level for risk-based exposure was set at 16 mg/kg in soils for this Site (on- and off-site parcels), one of USEPA’s conditions for closure was that any areas where remaining soils contain more than 1 mg/kg of PCBs would be restricted as “low occupancy” areas. This is defined as an area where occupancy for an individual not wearing dermal and respiratory protection is less than 335 hours per calendar year (or an average of 6.7 hours per week). Examples of such areas include a location in an industrial facility where a worker might spend small amounts of time per week (such as an unoccupied area outside of a building or in a non-office space in a warehouse where occupancy is transitory).

Therefore, the restrictive covenant for the off-site CSXT ROW parcel limits land use to nonresidential with a portion of the parcel also restricted to low occupancy (for PCBs as defined in 40 CFR Part 761) land use. The restrictive covenant lists the surveyed boundaries of the restricted areas.

## **8. CONCLUSIONS**

Based upon the confirmation samples obtained after the PCB cleanup soil removal in 2012, and additional delineation sampling in 2014, a small section of soil contains PCBs at levels above the risk-based site-specific MDEQ Part 201 cleanup goal of 16 mg/Kg along the off-site CSXT ROW. That area could not be excavated due to its presence below and/or proximity to the railroad tracks and ballast.

The additional delineation sampling results show that the remaining soils above the site-specific cleanup goal are present only in a narrow strip paralleling the excavation areas along the western side of the CSXT ROW, and that most of the soils along this portion of the ROW meet both the site-specific cleanup goal and the criteria for high occupancy under 40 CFR 761. The additional sampling also confirmed that there is also only a very small area extending out into the ROW where soils remain impacted above 50 mg/kg around the West-06 sampling location (Figure 7). Because this is a limited area and it is covered with ballast and tracks, the only remaining risk of exposure is to railroad maintenance workers who might encounter the soil during subsurface railroad ballast maintenance activities. Any potential exposure risk to railroad maintenance workers under other circumstances is limited by the presence of ballast and tracks on top of the underlying soils. The remaining risk will be managed by land use and other provisions in the restrictive covenant recorded for that off-site CSTX ROW parcel, which include warning signs indicating the presence of PCB contamination in the restricted area, and provisions for proper management and removal of the PCB impacted soils if future maintenance or construction activities involve excavating beneath the railroad ballast.

In addition, only two soil sampling locations (West-05 and West-06) reported PCBs detected above 1 mg/kg in the CSXT ROW adjacent to excavated Areas E and O (Figure 6). Although in general the entire ROW is by nature a low occupancy area, this narrow area of the ROW will be restricted to low occupancy use pursuant to 40 CFR 761.61 (Figure 7).

It is requested that USEPA concur that 1) response and delineation activities undertaken demonstrate that PCB impacted soils remaining in place within the off-site CSXT ROW parcel do not present an unacceptable risk to the public health or the environment; 2) the restrictive covenant for that parcel is sufficient to ensure that the PCB remediation waste remaining in place will not pose an unreasonable risk to public health or the environment; and 3) no further action for PCBs in soils, except as may be required under the restrictive covenant, is necessary under 40 CFR Part 761.

## **9. REFERENCES**

- Conestoga-Rovers & Associates, Inc., 1995. Final Remedial Investigation Report (dated April/June 1995).
- Conestoga-Rovers & Associates, Inc., 1996a. Final Feasibility Report (dated January 1996).
- Conestoga-Rovers & Associates, Inc., 1996b. Draft Remedial Action Plan (dated April 1996).
- Conestoga-Rovers & Associates, Inc., 2006. Draft Remedial Action Plan (dated October 2006).
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- Conestoga-Rovers & Associates, Inc., 2011. Supplemental Notice of Self-Implementing PCB Cleanup Report (dated November 4, 2011).
- Conestoga-Rovers & Associates, Inc., 2013. Post-IRA Soil Conditions Report (dated May 24, 2013).
- Michigan Department of Environmental Quality, 2009. Comment letter on *Appendices K and L for the October 2006 Incomplete Remedial Action Plan for the Barrels, Inc. Site, Ingham County, Michigan* (dated May 4, 2009).
- Progressive Engineering & Construction, Inc., 2014. Completion of Self-Implementing PCB Cleanup (dated April 29, 2014).
- Progressive Engineering & Construction, Inc., 2015. Completion of On-Site PCB Cleanup Report (dated May 14, 2015).
- USEPA, 2001. Conditional Approval letter of *Correspondence and Draft Remedial Action Plan, dated January 29, 2001* (dated January 29, 2001).
- USEPA, 2005. Approval letter of *Draft Remedial Action Plan and Notice of Coordinated Approvals/Risk-Based PCB Cleanup, dated September 27, 2004* (dated March 21, 2005).
- USEPA, 2011. Letter Confirming Conditional Approval of the *Supplemental Notice of Self-Implementing PCB Cleanup Report, dated November 4, 2011* (dated December 16, 2011).
- USEPA, 2014. Email requiring delineation of PCBs in off-site CSXT ROW.



## **TABLES**

Table 1. Barrels, Inc. Site - CSXT Right of Way, Western Row of Soil Samples

Area		ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW
Sample Identification		P2316-West-01-02	P2316-West-01-04	P2316-West-02-02	P2316-West-02-04	P2316-West-03-02	P2316-West-03-04	P2316-West-04-02	P2316-West-04-04	P2316-West-05-02	P2316-West-05-04	P2316-West-06-02
Sample Date		10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014
Sample Type		discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete
Sample Depth		(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS
<b>PCBs</b>	<b>Site Cleanup Goal</b>											
Aroclor-1016 (PCB-1016)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43	0.1 U	8.3
Aroclor-1221 (PCB-1221)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43	0.1 U	8.3
Aroclor-1232 (PCB-1232)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43	0.1 U	8.3
Aroclor-1242 (PCB-1242)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43	0.1 U	8.3
Aroclor-1248 (PCB-1248)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43	0.1 U	8.3
Aroclor-1254 (PCB-1254)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.8	0.1 U	85.0
Aroclor-1260 (PCB-1260)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43	0.1 U	8.3
Aroclor-1262 (PCB-1262)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43	0.1 U	8.3
Aroclor-1268 (PCB-1268)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43	0.1 U	8.3
Total PCBs	16	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	85.0
Units = mg/kg												
U - Not detected at the associated reporting limit.												

Table 1. Barrels, Inc. Site - CSXT Right of Way, Western Row of Soil Samples

Area		ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW
Sample Identification		P2316-West-06-04	P2316-West-07-02	P2316-West-07-04	P2316-West-08-02	P2316-West-08-04	P2316-West-09-02	P2316-West-09-04	P2316-West-10-02	P2316-West-10-04	P2316-West-11-02	P2316-West-11-04
Sample Date		10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014
Sample Type		discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete
Sample Depth		(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS
<b>PCBs</b>	<b>Site Cleanup Goal</b>											
Aroclor-1016 (PCB-1016)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1221 (PCB-1221)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1232 (PCB-1232)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1242 (PCB-1242)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1248 (PCB-1248)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1254 (PCB-1254)		1.1	0.55	0.1 U	0.15	0.1 U	0.34	0.1 U	0.31	0.1 U	0.1	0.1 U
Aroclor-1260 (PCB-1260)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1262 (PCB-1262)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1268 (PCB-1268)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total PCBs	16	1.1	0.55	ND	0.15	ND	0.34	ND	0.31	ND	0.1	ND
Units = mg/kg												
U - Not detected at the associated reporting limit.												

Table 1. Barrels, Inc. Site - CSXT Right of Way, Western Row of Soil Samples

Area		ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW	ROW
Sample Identification		P2316-West-12-02	P2316-West-12-04	P2316-West-13-02	P2316-West-13-04	P2316-West-14-02	P2316-West-14-04	87 - Dup 01	88 - Dup 02	89 - Dup 03	West MS/MSD-01	West MS/MSD-02
								(Dup of West-02-02)	(Dup of West-06-06)	(Dup of West-10-06)	(Dup of West-03-04)	(Dup of West-05-04)
Sample Date		10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014
Sample Type		discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete	discrete
Sample Depth		(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(4-6) ft BGS	(4-6) ft BGS	(2-4) ft BGS	(2-4) ft BGS
PCBs	Site Cleanup Goal											
Aroclor-1016 (PCB-1016)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1221 (PCB-1221)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1232 (PCB-1232)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1242 (PCB-1242)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1248 (PCB-1248)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1254 (PCB-1254)		0.1 U	0.1 U	0.14	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1260 (PCB-1260)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1262 (PCB-1262)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1268 (PCB-1268)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total PCBs	16	ND	ND	0.14	ND	ND	ND	ND	ND	ND	ND	ND
Units = mg/kg												
U - Not detected at the associated reporting limit.												

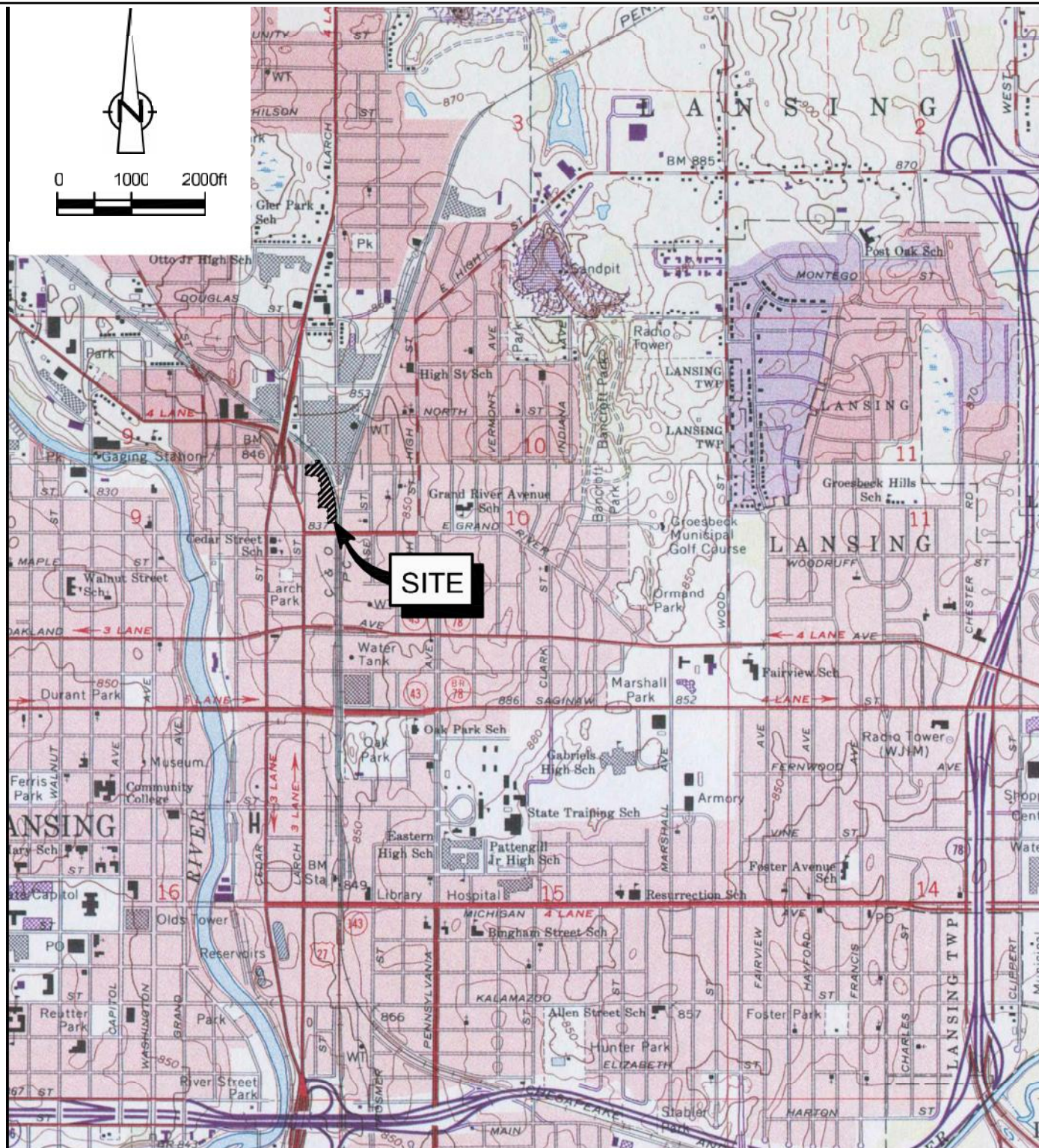
Table 2. Barrels, Inc. Site - CSXT Right of Way, Middle Row of Soil Samples

Area		ROW	ROW	ROW	ROW	ROW	ROW
Sample Identification		P2316-Mid-04-02	P2316-Mid-04-04	P2316-Mid-05-02	P2316-Mid-05-04	P2316-Mid-06-02	P2316-Mid-06-04
Sample Date		10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014
Sample Type		discrete	discrete	discrete	discrete	discrete	discrete
Sample Depth		(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS
<b>PCBs</b>	<b>Site Cleanup Goal</b>						
Aroclor-1016 (PCB-1016)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1221 (PCB-1221)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1232 (PCB-1232)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1242 (PCB-1242)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1248 (PCB-1248)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1254 (PCB-1254)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1260 (PCB-1260)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1262 (PCB-1262)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor-1268 (PCB-1268)		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total PCBs	16	ND	ND	ND	ND	ND	ND
Units = mg/kg							
U - Not detected at the associated reporting limit.							

## **FIGURES**



0 1000 2000ft



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE;  
LANSING NORTH, MICHIGAN  
LANSING SOUTH, MICHIGAN



NOTE: SOURCE DRAWINGS PREPARED BY CONESTOGA-ROVERS & ASSOCIATES.

**PROGRESSIVE**  
ENGINEERING & CONSTRUCTION, INC.  
Phone: (813) 930-0669 Fax: (813) 930-9809  
3912 W. Humphrey Street Tampa, Florida 33614  
E-mail: info@progressiveec.com  
Web Site: http://www.progressiveec.com

NO.	REVISION DETAILS	DATE
1		
2		
3		
4		
5		

## SITE LOCATION

BARRELS, INC PRP GROUP  
BARRELS, INC., LANSING, MICHIGAN

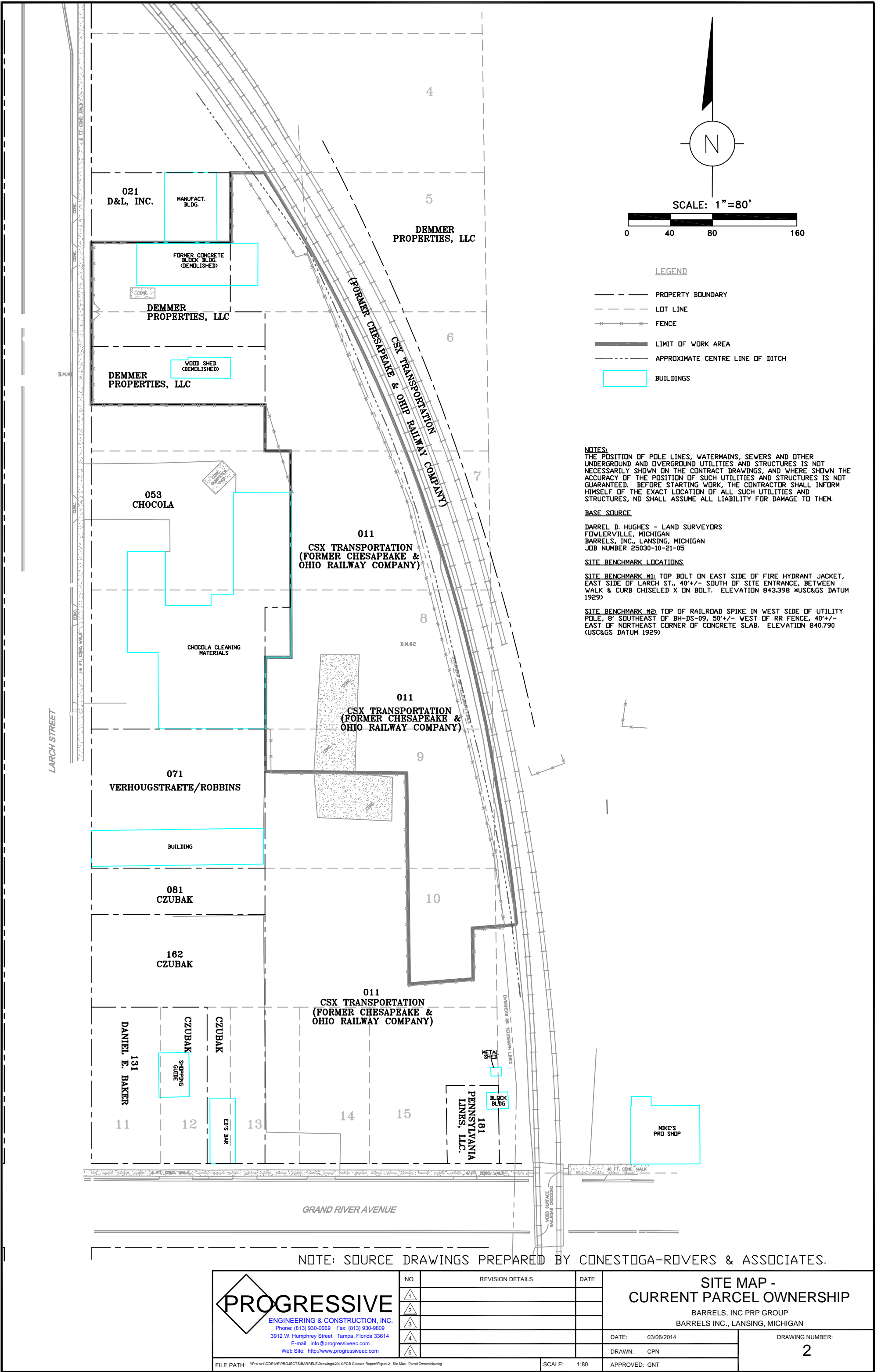
DATE: 02/04/2014

DRAWN BY: CPN

DRAWING NUMBER:

1





PROGRESSIVE

ENGINEERING & CONSTRUCTION, INC.  
Phone: (813) 930-0669 Fax: (813) 930-9809  
3912 W. Humphrey Street Tampa, Florida 33614  
E-mail: info@progressiveec.com  
Web Site: http://www.progressiveec.com

NO.	REVISION DETAILS	DATE
1		
2		
3		
4		
5		

SITE MAP -  
CURRENT PARCEL OWNERSHIP

BARRELS, INC PRP GROUP  
BARRELS INC., LANSING, MICHIGAN

DATE: 03/06/2014

DRAWN: CPN

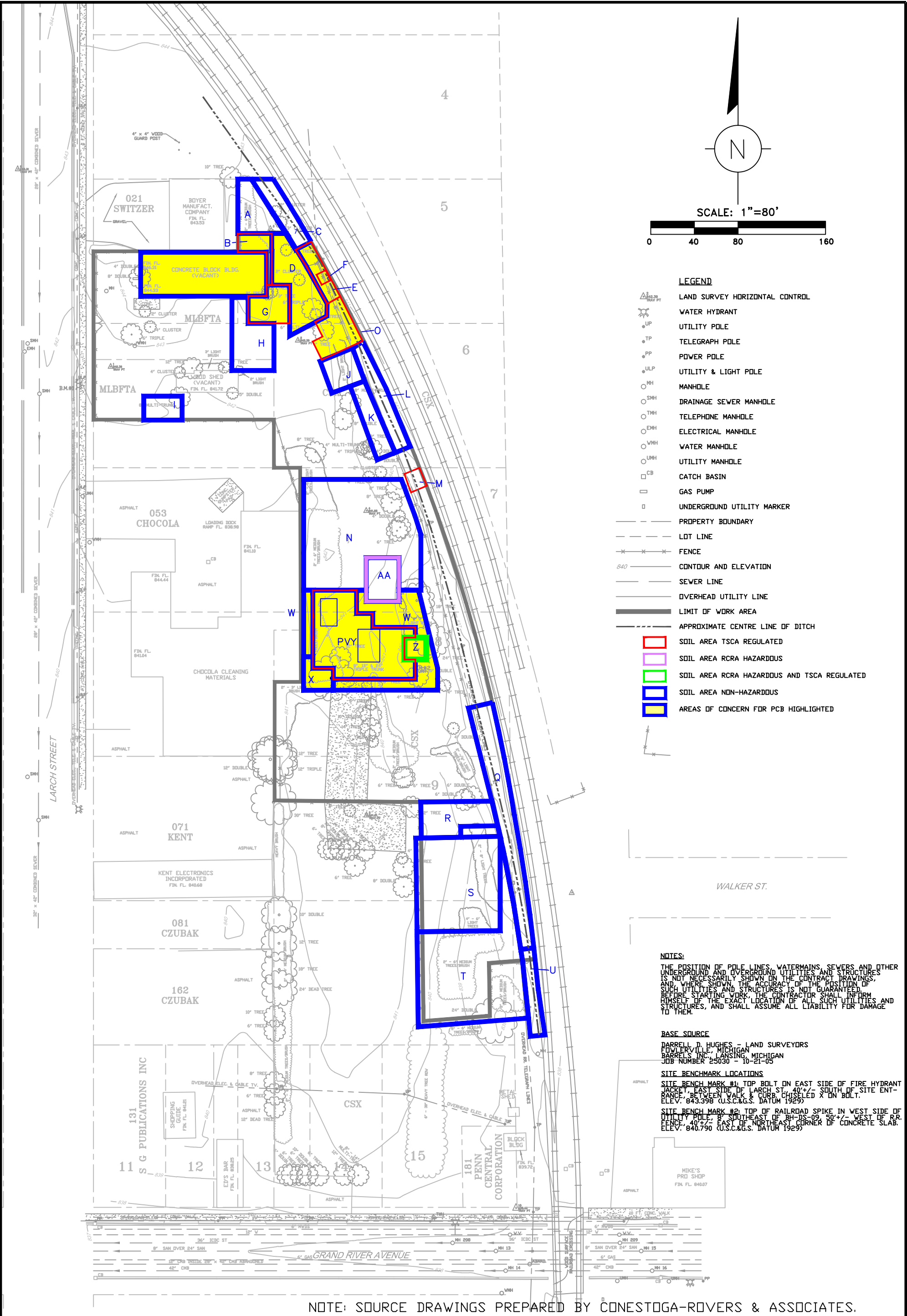
APPROVED: GNT

DRAWING NUMBER:  
2

FILE PATH: \\Pro-sv1\GDRIVE\PROJECTS\BARRELS\Drawings\2014PCB Closure Report\Figure 2 - Site Map - Parcel Ownership.dwg

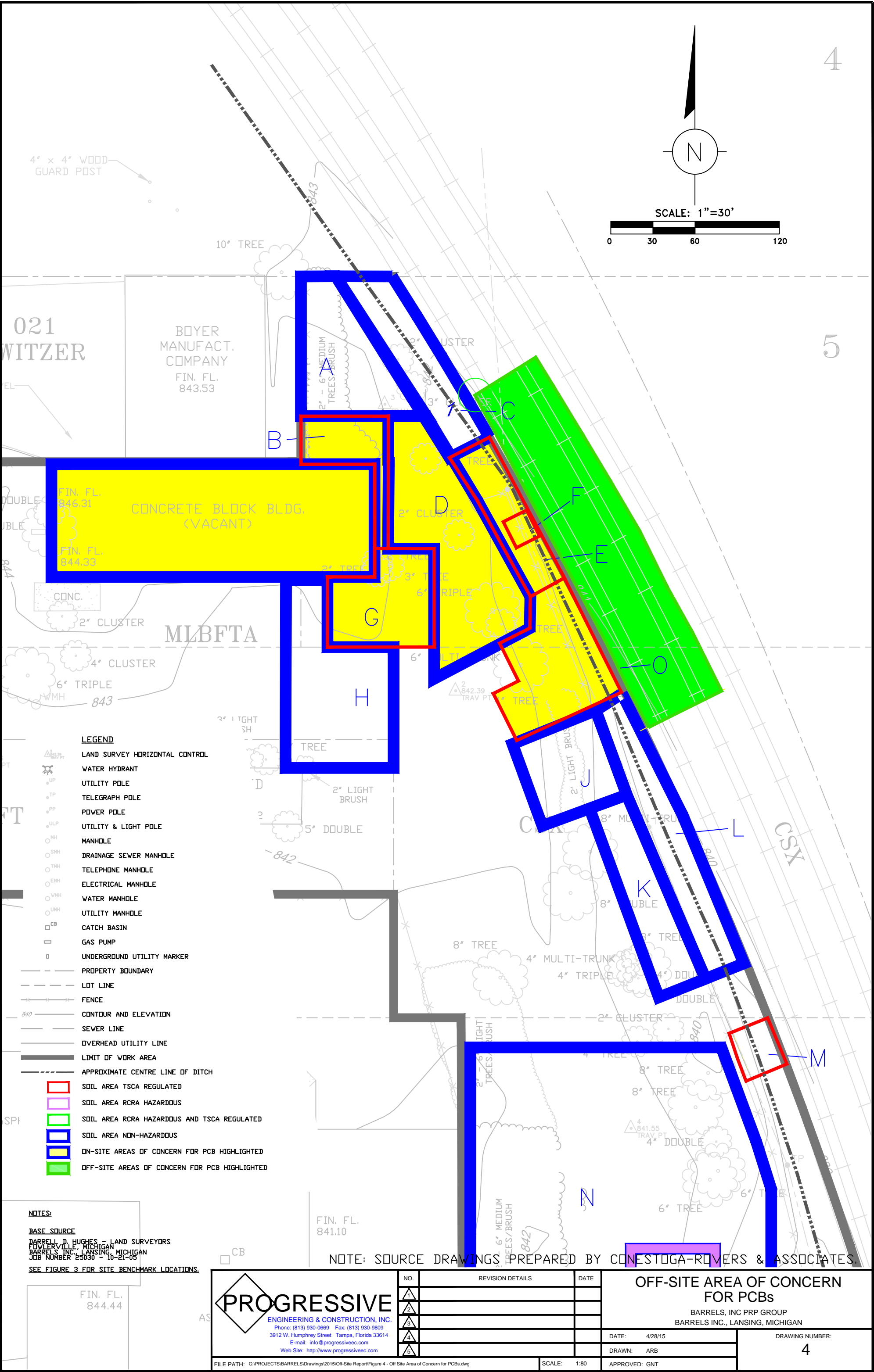
SCALE: 1:80

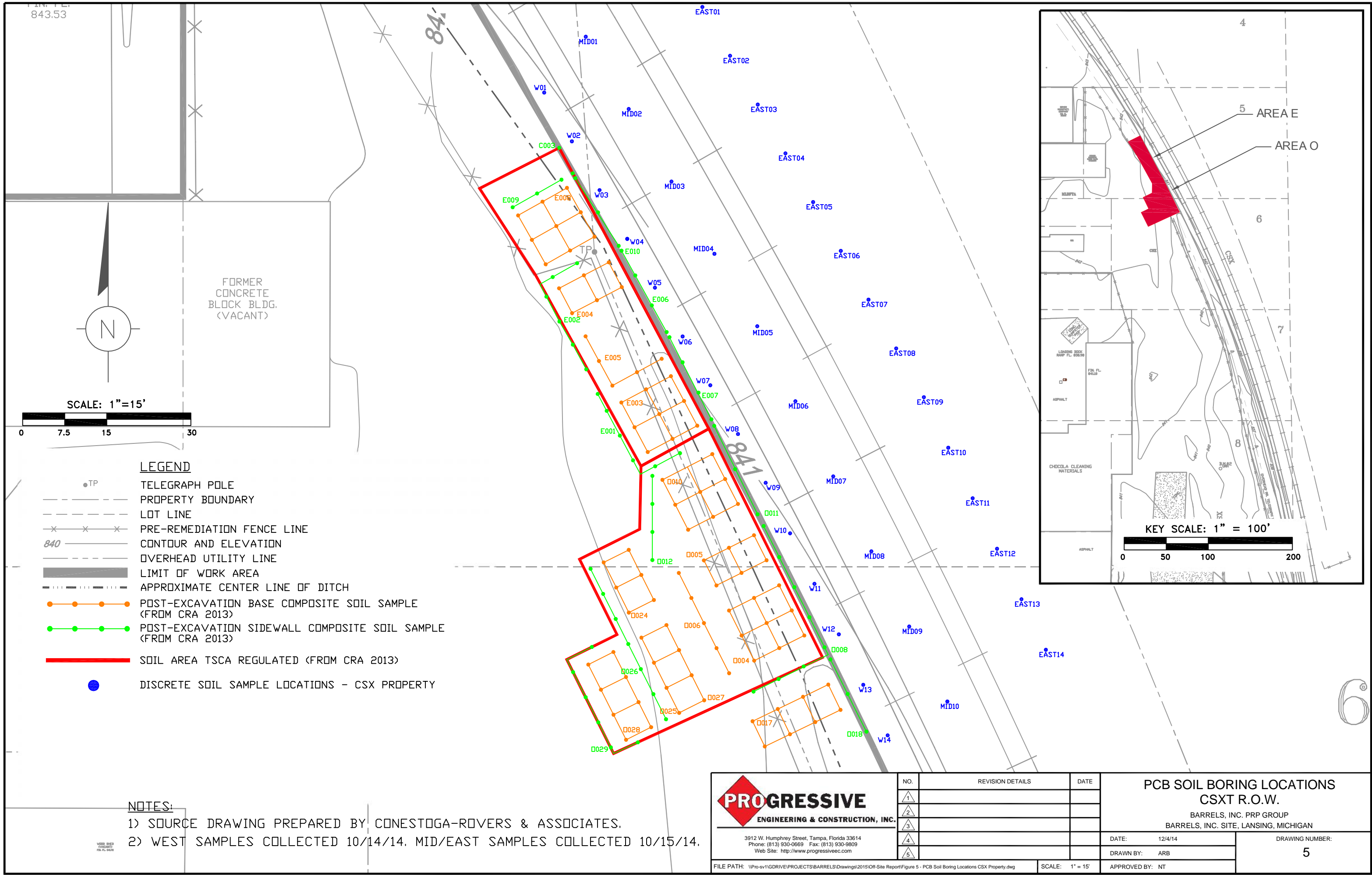




NOTE: SOURCE DRAWINGS PREPARED BY CONESTOGA-ROVERS & ASSOCIATES.

<div><div>PROGRESSIVE</div><div>ENGINEERING &amp; CONSTRUCTION, INC.</div><div>Phone: (813) 930-0669 Fax: (813) 930-9809</div><div>3912 W. Humphrey Street Tampa, Florida 33614</div><div>E-mail: info@progressiveec.com</div><div>Web Site: http://www.progressiveec.com</div></div>	NO.	REVISION DETAILS	DATE	EXCAVATION AREAS FOR PCBs	
	1				
	2				
	3				
	4				
				BARRELS, INC PRP GROUP	
				BARRELS INC., LANSING, MICHIGAN	
				DATE: 02/04/2014	DRAWING NUMBER:
				DRAWN: CPN	3
FILE PATH: \\Pro-sv1\GDRIVE\PROJECTS\BARRELS\Drawings\2015\Off-Site Report\Figure 3a - Excavation Areas for PCBs - YELLOW.dwg				APPROVED: GNT	





LEGEND

- TP TELEGRAPH POLE
- PROPERTY BOUNDARY
- LOT LINE
- × × × PRE-REMEDIATION FENCE LINE
- 840 CONTOUR AND ELEVATION
- OVERHEAD UTILITY LINE
- LIMIT OF WORK AREA
- APPROXIMATE CENTER LINE OF DITCH
- POST-EXCAVATION BASE COMPOSITE SOIL SAMPLE (FROM CRA 2013)
- POST-EXCAVATION SIDEWALL COMPOSITE SOIL SAMPLE (FROM CRA 2013)
- SOIL AREA TSCA REGULATED (FROM CRA 2013)
- DISCRETE SOIL SAMPLE LOCATIONS - CSX PROPERTY

NOTES:

- 1) SOURCE DRAWING PREPARED BY CONESTOGA-ROVERS & ASSOCIATES.
- 2) WEST SAMPLES COLLECTED 10/14/14. MID/EAST SAMPLES COLLECTED 10/15/14.

3912 W. Humphrey Street, Tampa, Florida 33614  
Phone: (813) 930-0669 Fax: (813) 930-9809  
Web Site: <http://www.progressiveec.com>

NO.	REVISION DETAILS	DATE
1		
2		
3		
4		
5		

**PCB SOIL BORING LOCATIONS  
CSXT R.O.W.**

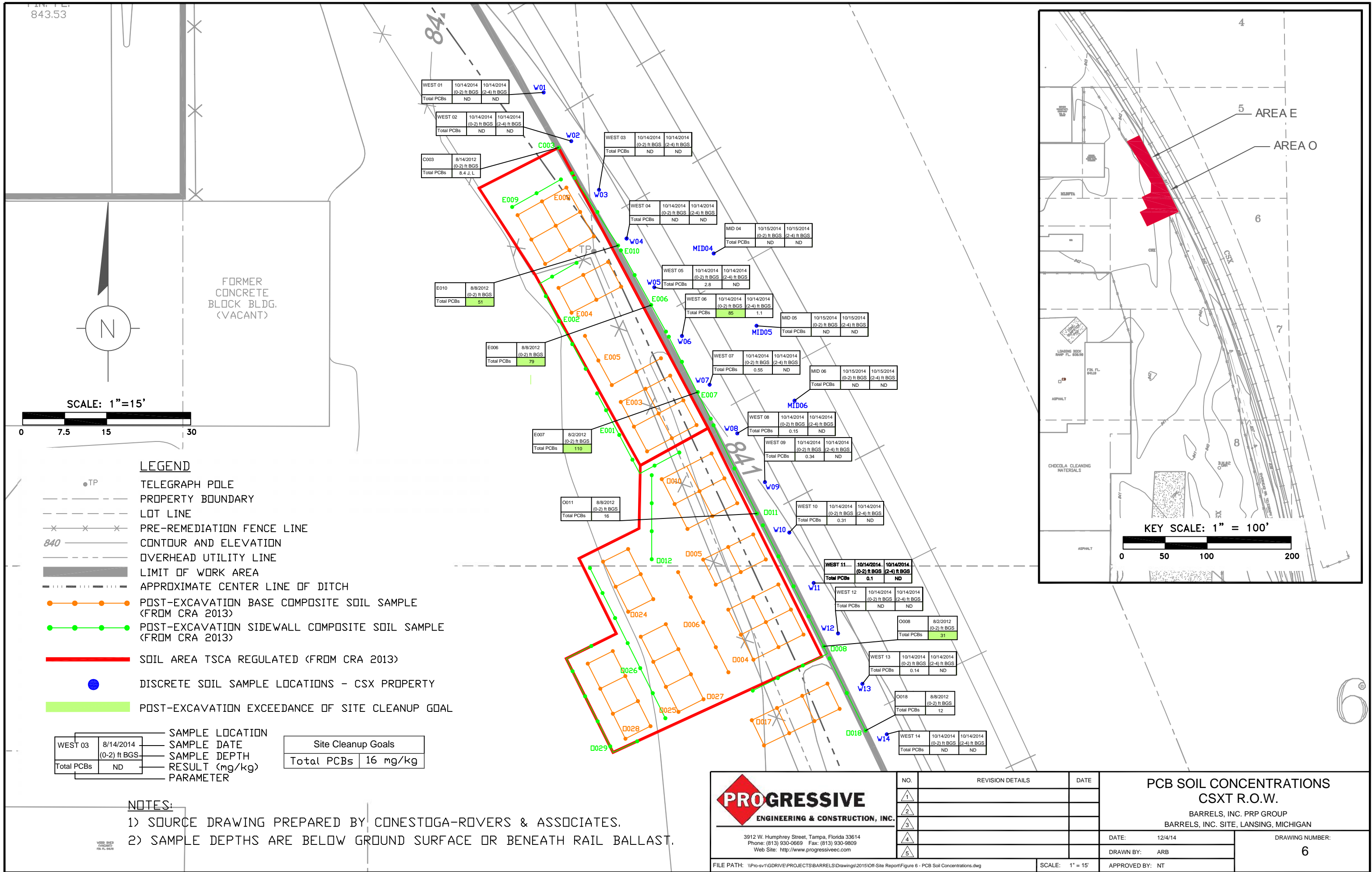
BARRELS, INC. PRP GROUP  
BARRELS, INC. SITE, LANSING, MICHIGAN

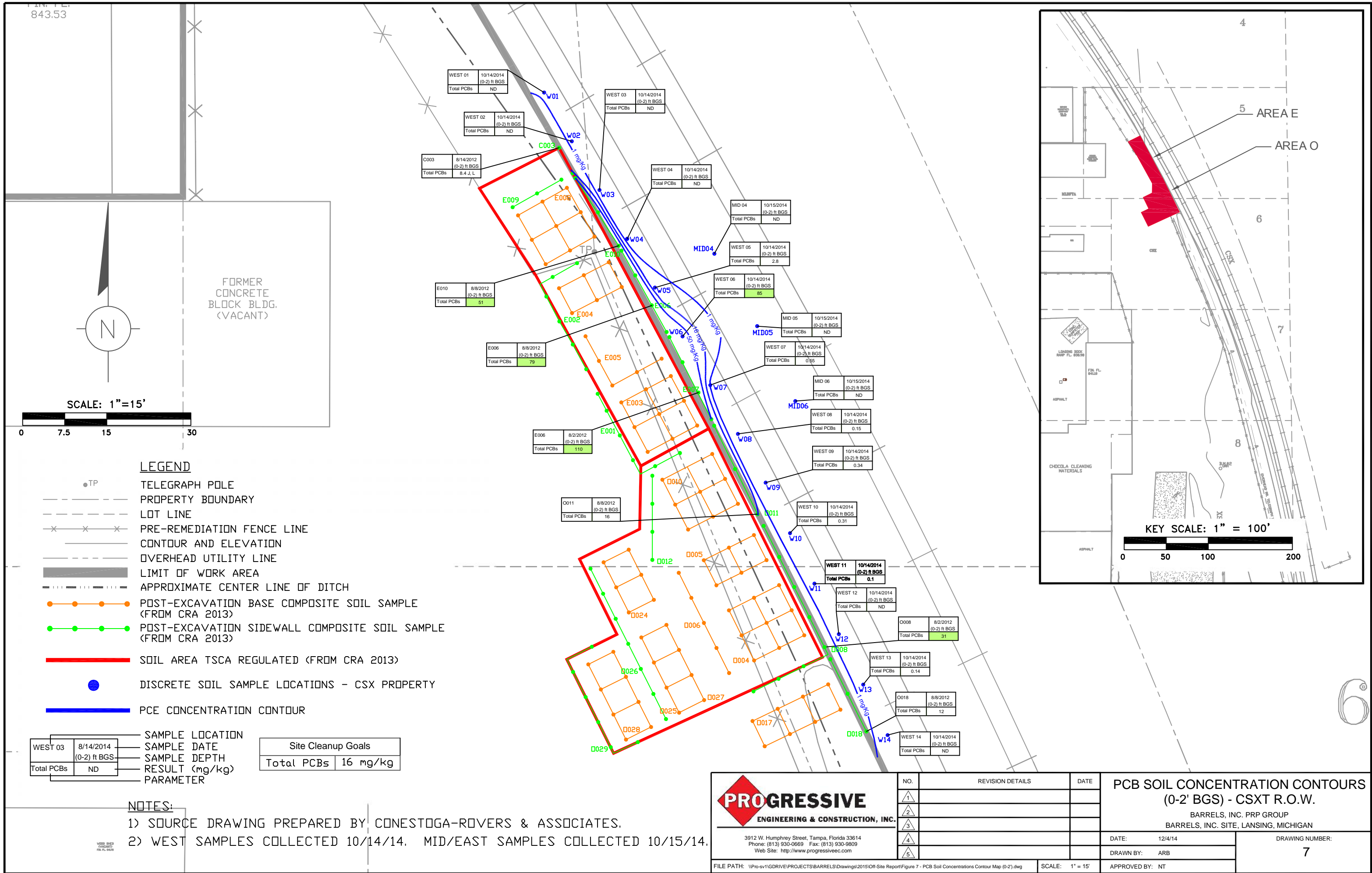
DATE: 12/4/14	DRAWING NUMBER: <b>5</b>
DRAWN BY: ARB	
APPROVED BY: NT	

FILE PATH: \\Pro-sv1\GDRIVE\PROJECTS\BARRELS\Drawings\2015\Off-Site Report\Figure 5 - PCB Soil Boring Locations CSX Property.dwg

SCALE: 1" = 15'



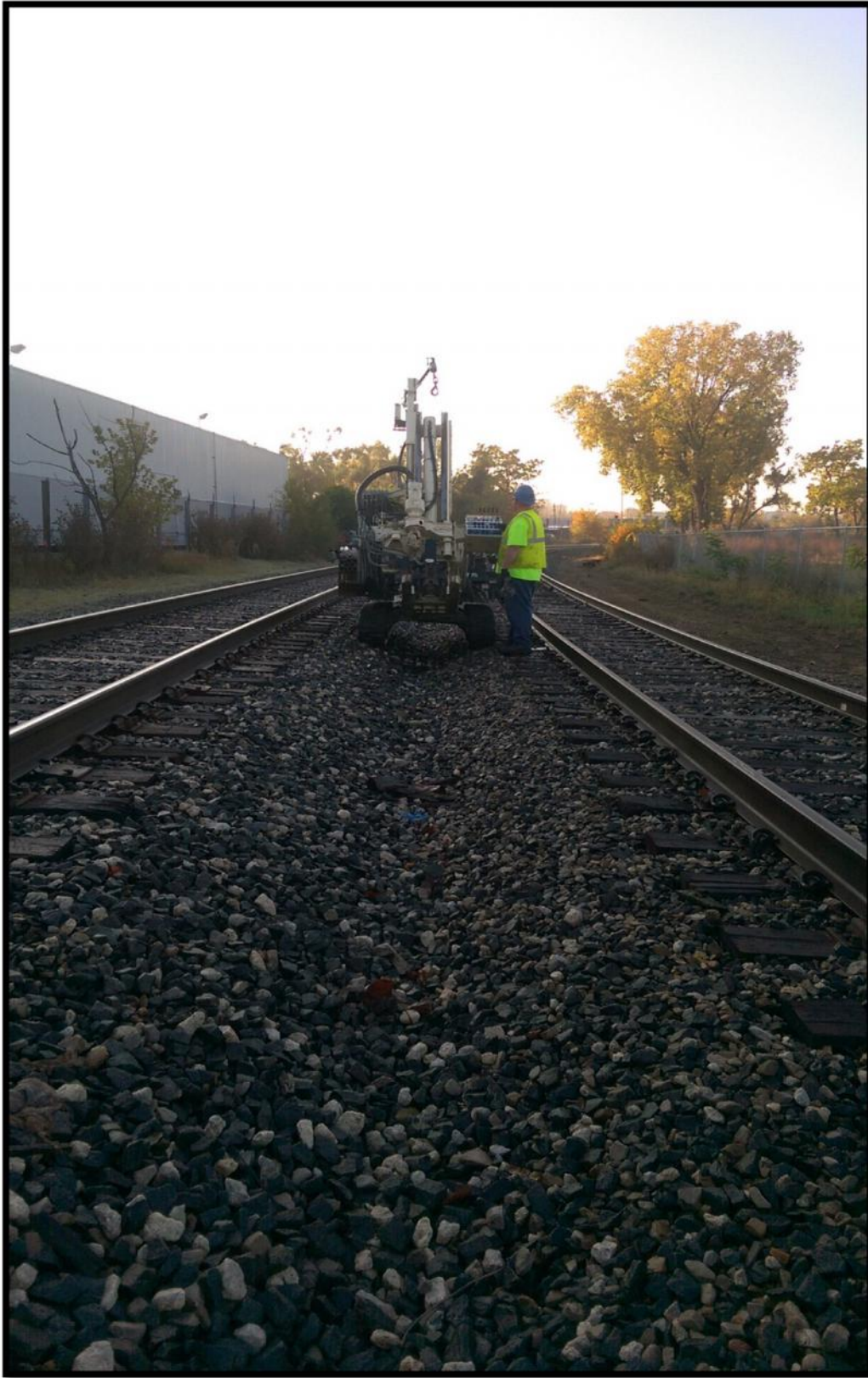








**Figure 8: Barrels, Inc. Site - View of Sampling Beneath Ballast - Western Side of CSXT ROW**



**Figure 9: Barrels, Inc. Site - View of Sampling Beneath Railroad Ballast - Middle of CSXT ROW**

## **APPENDIX A**

### **Restrictive Covenant for the Off-Site CSXT ROW Parcel**



**DECLARATION OF RESTRICTIVE COVENANT AND  
GRANT OF ENVIRONMENTAL PROTECTION EASEMENT**

This transfer is exempt from County and State transfer taxes pursuant to MCL 207.505(a) and MCL 207.526(a), respectively, because the amount of consideration for the transfer tax is less than \$100.00.

**Barrels, Inc. Superfund Site  
Ingham County, Michigan  
MDEQ Site ID No. 33000004  
USEPA Site No. MID017188673**

MDEQ Reference No. \_\_\_\_\_

This Declaration of Restrictive Covenant and Grant of Environmental Protection Easement ("Restrictive Covenant and Easement") is made on \_\_\_\_\_, 2015, by **CSX Transportation, Inc. (CSXT)** the Grantor, whose address is 500 Water Street, Jacksonville, FL 32202 for the benefit of the Grantee, the Michigan Department of Environmental Quality ("MDEQ"), with the United States Environmental Protection Agency ("USEPA") as a Third Party Beneficiary.

**RECITALS**

- i. The Grantor is the title holder of the real property located in Ingham County, Michigan and legally described in Exhibit 1 attached hereto ("Property"). The parcel number is No. 33-01-01-09-281-001 (Exhibit 1).
- ii. The purpose of this Restrictive Covenant and Easement is to create restrictions that run with the land in the Grantor's real property rights; to protect the public health, safety, and welfare, and the environment; to prohibit or restrict activities that could result in unacceptable exposure to environmental contamination present at the Property; and to grant access to the Grantee, the United States Environmental Protection Agency ("USEPA") as a Third Party Beneficiary, and either the MDEQ or the USEPA's representatives to monitor and conduct Response Activities until such time that all PCB cleanup is completed

iii. The Property is adjacent to the Barrels, Inc. Superfund Site (the "Barrels Site"), MDEQ Site ID No. 33000004. Hazardous substances, including polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), metals, and cyanide, have been released and/or disposed of on the Property due to release from the Barrels Site. The Barrels Site was placed on the National Priorities List ("NPL") on October 4, 1989 and is a facility as that term is defined in Section 101(9) of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9601 *et seq.* ("CERCLA"); and Section 20101(1)(r) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.20101 *et seq.* ("NREPA"). This Restrictive Covenant and Easement applies to the PCB contamination left in place beneath the railroad ballast at the Property.

iv. Response activities were implemented to address environmental contamination at the Property pursuant to Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.20101 *et seq.* and 40 CFR Part 761.

v. At the time of recording this Restrictive Covenant and Easement, contamination remains at the Property. The USEPA and the MDEQ have determined that the hazardous substances at the Property present a threat to human health through drinking water ingestion and direct contact with soils; and that the land use and resource use restrictions set forth below are required to prevent unacceptable exposures until such time that all PCB cleanup is completed.

vi. The restrictions contained in this Restrictive Covenant and Easement are based upon information available to the USEPA and the MDEQ at the time of recording. Failure of the Response Activities to achieve and maintain the criteria, and exposure controls; future changes in the environmental condition of the Property or changes in the applicable cleanup criteria; the discovery of environmental conditions at the Property that were not accounted for when response activities were conducted, regardless of the date of the release of hazardous substances contributing to those environmental conditions; or the use of the Property in a manner inconsistent with the restrictions described herein, may result in this Restrictive Covenant and Easement not being protective of public health, safety, and welfare, and the environment. Information pertaining to the environmental conditions at the Property and Response Activities undertaken at the Barrels Site is on file with the USEPA, the MDEQ Remediation and Redevelopment Division, and CSXT per applicable record retention requirements.

vii. The MDEQ recommends that prospective purchasers or users of the Property undertake appropriate due diligence prior to acquiring or using this Property, and undertake appropriate actions to comply with the applicable requirements of Section 20107a of the NREPA and 40 CFR Part 761.

### **SUMMARY OF RESPONSE ACTIVITIES**

Former operations at the Barrels Site resulted in soil contamination with PCBs, VOCs, SVOCs, metals and cyanide. Prior to recording of this Restrictive Covenant and Easement, response activities have been undertaken to remove some of the hazardous substances from the Barrels Site and the adjacent parcel. Contaminated soils at the Barrels Site have been excavated and appropriately disposed of off-site, concentrations of contaminants remaining in soils on the Barrels Site do not exceed MDEQ's Part 201 nonresidential exposure cleanup criteria, and separate Restrictive Covenants and Easements apply to specific areas on the Barrels Site that contain PCBs above the high occupancy criteria of 40 CFR Part 761. Contaminants from the

Barrels Site migrated onto the adjacent CSXT Railroad ROW ( the "Property") and have been excavated to the extent possible and appropriately disposed of off-site; concentrations of contaminants remaining in soils on the Property do not exceed nonresidential exposure cleanup criteria with the exception of a limited area of soil which contains PCBs above the site-specific risk-based cleanup levels (MDEQ Part 201), and, in some locations, the TSCA regulatory level for PCB remediation waste. Those soils left in place beneath the railroad ballast at the Property are the subject of this Restrictive Covenant and Easement. Groundwater beneath the Barrels Site is impacted with VOCs attributed to an upgradient source, therefore no active remediation of groundwater has been performed.

### **DEFINITIONS**

"Grantee" shall mean the MDEQ, its successor entities, and those persons or entities acting on its behalf;

"Grantor" shall mean the title holder of the Property at the time this Restrictive Covenant and Easement is executed or any future title holder of the Property or some relevant sub-portion of the Property;

"MDEQ" shall mean the Michigan Department of Environmental Quality, its successor entities, and those persons or entities acting on its behalf;

"NREPA" shall mean the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.101 *et seq.*;

"Part 201" shall mean Part 201, Environmental Remediation, of the NREPA, MCL 324.20101 *et seq.*;

"Property" shall mean the real property legally described in Exhibit 1, i.e., the CSXT Right-of-way (ROW) adjacent to the Barrels Site;

"RCRA" shall mean 42 U.S.C. §6901 *et seq* (Resource Conservation and Recovery Act of 1976);

"Response Activities" shall mean, consistent with Section 101(25) of Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. Section 9601(25), such actions as have been or may be necessary to conduct any removal, remedy or remedial action, as those terms are defined in Sections 101(23) and 101(24) of CERCLA, 42 U.S.C. Sections 9601(23) and 9601(24), on the Property and/or at the Barrels Site, including enforcement activities related thereto;

"Barrels Site" shall mean the Barrels, Inc. NPL site;

"USEPA" shall mean the United States Environmental Protection Agency, its successor entities and those persons or entities acting on its behalf;

"40 CFR Part 761" shall mean regulations promulgated pursuant to Section 6(e) of The Toxic Substances Control Act of 1976 (TSCA), 15 U.S.C. 2601 *et seq.*; and

All other terms used in this document which are defined in Part 3, Definitions, of the NREPA; Part 201; or the Part 201 Administrative Rules ("Part 201 Rules"), 2013 AACRS R 299.1 –

299.50, as amended, shall have the same meaning in this document as in Parts 3 and 201 of the NREPA and the Part 201 Rules, as of the date of execution of this Restrictive Covenant and Easement.

**NOW THEREFORE,**

For valuable consideration of less than \$100.00, the receipt of which is hereby acknowledged, the Grantor, on behalf of itself, its successors and assigns, hereby covenants and declares that the Property shall be subject to the restrictions set forth below, for the benefit of the Grantee, and grants and conveys to the Grantee, and its assigns and representatives, the perpetual right to enforce said restrictions. The Grantor further, on behalf of itself, its successors and assigns, does grant and convey to the Grantee and its representatives an environmental protection easement of the nature, character, and purposes set forth below with respect to the Property, and the right to enforce said easement.

1. **Restrictions on Land Use:** Until such time that all PCB cleanup is completed, the Grantor shall:

- (a) Restrict use of the property to nonresidential land use allowed for under Section 20120a(1)(b) of NREPA as shown on Survey E2-1 in Exhibit 2 and described in detail in Exhibit 3.
- (b) Prohibit land uses that include construction of schools, daycare facilities, hospitals, health care facilities, and any residential use.
- (c) Restrict portions of the parcel to low occupancy land use as defined in 40 CFR Part 761 to prevent unacceptable exposure to PCBs in soils as shown on Survey E2-2 in Exhibit 2 and described in Exhibit 3.

2. **Restrictions on Activity:** Until such time that all PCB cleanup is completed, the Grantor shall:

- (a) Prohibit activities that cause existing contamination to migrate beyond the boundaries of the Property, increase the cost of Response Activities, or otherwise exacerbate the existing contamination located on the Property. The term "exacerbation" is more specifically defined in Section 20101(1)(r) of the NREPA, MCL 324.20101(1)(r).
- (b) Prohibit and prevent use of the Property in a manner that may interfere with Response Activities at the Property, including interim response, remedial action, operation and maintenance, monitoring, or other measures necessary to ensure the effectiveness and integrity of the remedial action.
- (c) Prohibit the construction and use of wells or other devices on the Property to extract groundwater for consumption, irrigation, or any other purpose, except as provided below:
  - i. Wells and other devices approved by MDEQ or USEPA and constructed for the purpose of evaluating groundwater quality or to remediate subsurface contamination associated with a release of regulated substances into the environment are permitted provided the construction of the wells or devices complies with all applicable local, state, and federal laws and regulations and does not cause or result in a new release, exacerbation of existing contamination, or any other violation of local, state, or federal laws or regulations.

- ii. Short-term dewatering for construction purposes is permitted provided the dewatering, including management and disposal of the groundwater, is conducted in accordance with all applicable local, state, and federal laws and regulations and does not cause or result in a new release, exacerbation of existing contamination, or any other violation of local, state, and federal environmental laws and regulations.

(d) Prohibit any activities that would require workers not wearing dermal and respiratory protection to have direct contact with soil containing PCBs in specific areas of the Property for more than an average of 6.7 hours per week, as defined in 40 CFR §761.3 as low-occupancy use within the restricted areas shown on Survey E2-2 in Exhibit 2.

(e) Prohibit any excavations beneath the existing railroad ballast for purposes of repair or modification of the railroad tracks in the restricted area, unless workers trained in handling PCB-impacted materials will be present during excavation work and appropriate personal protective equipment (PPE) protocols will be followed to avoid unacceptable exposure to PCB-impacted soils in accordance with Occupational Safety and Health Administration (OSHA) Rule 29 CFR Part 1910. Any disturbance of soils containing PCBs on the Property should be done with caution and should adhere to the requirements for characterization, notification, confirmation sampling and reporting to State and Federal Agencies, and subsequent management of PCB containing materials under 40 CFR Part 761 in accordance with the *"Risk-Based PCB Cleanup Application, Barrels Off-site Parcel,"* dated \_\_\_/\_\_\_/2015.

(f) Bulk PCB remediation wastes with a PCB concentration 50 mg/kg were identified beneath the railroad ballast on the west side of the Property (located east of the Barrels Inc. Site), which include wastes that are presumed to contain PCBs > 50 mg/kg based on prior sampling data (unless further characterization is performed in accordance with 40 CFR Part 761 Subpart N, to characterize PCB concentrations for purposes of segregation and disposal in accordance with §761 (a)(5)(v)(A)). Currently, the areas of impact containing bulk PCB remediation wastes are inaccessible and the PCBs must remain on the Property. However, these PCB remediation wastes shall be removed when they become accessible during maintenance activities or any other time the area becomes accessible. Once removed, these wastes shall be disposed of in a hazardous waste landfill permitted by USEPA under section 3004 of RCRA, or a landfill permitted by a State under section 3006 of RCRA, or an approved PCB disposal facility. If additional characterization work is completed, a revised cleanup plan must be submitted to USEPA for approval prior to disposal in accordance with §761.61(a). At the completion of the required future cleanup activities, sampling must also be performed in accordance with 40 CFR Part 761 Subpart O to demonstrate that the cleanup is complete.

If the land use is not changing as a result of the area becoming accessible (i.e., if the tracks and ballast are being repaired, maintained, or replaced), the bulk PCB remediation waste shall be removed only to the extent needed to meet the USEPA- and MDEQ-approved risk-based, site-specific cleanup level for the Barrels Site of 16 mg/kg total PCBs, unless CSXT, at its own discretion, elects to remove soils to meet an alternative standard (e.g., the high occupancy standard of 1 mg/kg) provided that the requirements for cleanup and disposal of PCB remediation waste in 40 CFR 761.61 are met with all activities performed in accordance with the *"Risk-Based PCB Cleanup Application, Barrels Off-site Parcel,"* dated \_\_\_/\_\_\_/2015. If the area has become accessible due to a change in land use, then the soils shall be removed to the appropriate concentration to meet the requirements for the new land use at the time of the removal. All activities will be performed in accordance with current federal and state regulations at the time the removal is performed.

(g) In the event that PCB impacted soils are removed in future such that all remaining soils on the Property meet the high occupancy cleanup standard of 40 CFR 761.61, a modification to this deed restriction may be executed to remove the restriction limiting land use to low occupancy or any other applicable conditions.

3. **Permanent Markers:**

(a) The Grantor shall allow the installation of permanent markers that have been approved by the USEPA and the MDEQ along the Property boundary immediately adjacent to the boundary fence in the vicinity of the area where PCB-impacted soils remain. These permanent markers shall more or less describe the restricted areas of the Property and the nature of the prohibitions specified in the provisions of this Restrictive Covenant and Easement and the liber and page number of this Restrictive Covenant and Easement as recorded with the Ingham County Register of Deeds. The Grantor shall not remove, cover, obscure, or otherwise alter or interfere with any permanent markers placed on the Property at the locations generally depicted in Exhibit 4 until such time that cleanup of all PCBs is completed in the future and modifications to the deed restrictions are executed. The Grantor shall keep vegetation and other materials clear of any permanent markers to assure that the markers are readily visible.

4. **Management of Contaminated Soil, Media, and Debris:** The Grantor shall manage all soils, media and/or debris located on the Property in accordance with the applicable requirements of Section 20120c of Part 201, MCL 324.20120c and Part 111, Hazardous Waste Management, of the NREPA, MCL 324.11101 *et seq.*; the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 *et seq.*; the TSCA, 15 U.S.C. 2601 *et seq.*; administrative rules promulgated thereunder; and all other relevant state and federal laws and regulations according to the *"Risk-Based PCB Cleanup Application, Barrels Off-site Parcel,"* dated \_\_/\_\_/2015, including proper disposal, confirmation sampling, and reporting to USEPA and MDEQ.

5. **Access:** The Grantor grants the Grantee and its representatives the right to enter the Property at reasonable times for the purpose of determining and monitoring compliance with the approval of the future NFA Report, the *"Risk-Based PCB Cleanup Application, Barrels Off-site Parcel,"* dated \_\_/\_\_/2015 and with this Restrictive Covenant and Easement, including the right to take samples, inspect the operation of the Response Activities, if any, and inspect any records relating thereto; and to perform any actions necessary to maintain compliance with Part 201 and 40 CFR Part 761.

All persons entering the Property pursuant to this Restrictive Covenant and Easement shall wear safety glasses with side shields, hard hats, and steel-toed safety shoes, and shall abide by Grantor's Safety Rules and Procedures, any safety instructions given by Grantor and remain in compliance with all Occupational Safety and Health Act and Federal Railroad Administration regulations. All equipment shall be moved across railroad track(s) ONLY at a public crossing absent special advance written permission from Grantor. All persons entering the Property pursuant to this Restrictive Covenant and Easement agrees not to enter upon, cross or foul track until given signal to do so by a flagman.

Nothing in this Restrictive Covenant and Easement shall limit or otherwise affect the Grantee's right of entry and access, or authorities to take Response Activities as defined in this Restrictive Covenant and Easement, as well as in NREPA, and any successor statutory provisions, or other state or federal law.

6. **Term:** This Restrictive Covenant and Easement shall run with the land and shall be binding on the Grantor, including persons as set forth in Paragraph 13(e), Successors.

7. **Third Party Beneficiary:** The Grantor, on behalf of itself and its successors, transferees, and assigns, hereby agrees that the United States, acting by and through the USEPA, its successors and assigns, shall be a third party beneficiary ("Third Party Beneficiary") of all the benefits and rights set out in the restrictions, covenants, easements, exceptions, notifications, conditions, and agreements herein, and that the Third Party Beneficiary shall have the right to enforce the restrictions described herein as if it was a party hereto. No other rights in third parties are intended by this Restrictive Covenant and Easement, and no other person or entity shall have any rights or authorities hereunder to enforce these restrictions, terms, conditions, or obligations beyond the Grantor, the Grantee, their successors and assigns, and the Third Party Beneficiary.

8. **Enforcement:** The State of Michigan, through the MDEQ; and the United States of America, through the USEPA as a Third Party Beneficiary, may enforce the restrictions and grant of easement set forth in this Restrictive Covenant and Easement by legal action in a court of competent jurisdiction.

9. **USEPA Entry, Access, and Response Authority:** Nothing in this Restrictive Covenant and Easement shall limit or otherwise affect the USEPA's right of entry and access, or authority to undertake Response Activities as defined in this Restrictive Covenant and Easement, as well as in CERCLA, the National Contingency Plan, 40 Code of Federal Regulations Part 300, and any successor statutory provisions, or other state or federal law. The Grantor consents to officers, employees, contractors, and authorized representatives of the USEPA entering and having continued access to this Property for the purposes described in Paragraph 5 above, subject to the same conditions and agreements upon entry in Paragraph 5, above.

10. **Modification/Release/Rescission:** The Grantor may request in writing to the MDEQ and USEPA, at the addresses provided in Paragraph 12, below, modifications to, or release or rescission of, this Restrictive Covenant and Easement. This Restrictive Covenant and Easement may be modified, released, or rescinded only with the written approval of the MDEQ and the USEPA. Any approved modification to, or release or rescission of, this Restrictive Covenant and Easement shall be filed with the appropriate county Register of Deeds by the Grantor and a certified copy shall be returned to the MDEQ and the USEPA at the addresses provided in Paragraph 12, below.

11. **Transfer of Interest:** The Grantor shall provide notice at the addresses provided in this document to the MDEQ and to the USEPA of the Grantor's intent to transfer any interest in the Property, or any portion thereof, at least fourteen (14) business days prior to consummating the conveyance. A conveyance of title, easement, or other interest in the Property shall not be consummated by the Grantor without adequate and complete provision for compliance with the terms and conditions of this Restrictive Covenant and Easement and the applicable provisions of Section 20116 of the NREPA. The Grantor shall include in any instrument conveying any interest in any portion of the Property, including, but not limited to, deeds, leases, and mortgages, a notice which is in substantially the following form:

**NOTICE:** THE INTEREST CONVEYED HEREBY IS SUBJECT TO A DECLARATION OF RESTRICTIVE COVENANT AND ENVIRONMENTAL PROTECTION EASEMENT, DATED [month, day, year], AND RECORDED WITH THE INGHAM COUNTY REGISTER OF DEEDS, LIBER \_\_\_\_\_, PAGE \_\_\_\_\_.

12. **Notices:** Any notice, demand, request, consent, approval, or communication that is required to be made or obtained under this Restrictive Covenant and Easement shall be made in writing; include a statement that the notice is being made pursuant to the requirements of this Restrictive Covenant and Easement; include the MDEQ Site ID number, parcel number, and reference number; and shall be served either personally, or sent via first class mail, postage prepaid, as follows:

For the Grantor:

Dan Dyer, Manager - Environmental Remediation  
CSX Transportation Inc.  
31 E. Jordan Street  
Indianapolis, IN 46204

For the Grantee:

Chief  
Remediation and Redevelopment Division  
Michigan Department of Environmental Quality  
P.O. Box 30426  
Lansing, MI 48909-7926

For the Third Party Beneficiary:

Director  
Superfund Division (SR-6J)  
U.S. Environmental Protection Agency, Region 5  
77 West Jackson Blvd.  
Chicago, IL 60604

Office of Regional Counsel (C-14J)  
U.S. Environmental Protection Agency, Region 5  
77 West Jackson Blvd.  
Chicago, IL 60604

Chief  
Remediation and Reuse Branch  
Land and Chemicals Division  
U.S. Environmental Protection Agency, Region 5  
77 West Jackson Blvd.  
Chicago, IL 60604

13. **Miscellaneous:**

(a) **Controlling Law.** The interpretation and performance of this Restrictive Covenant and Easement shall be governed by the laws of the United States, and by the laws and regulations of the State of Michigan for all other purposes hereunder (without reference to choice of laws and principles thereof). The right to enforce the conditions and restrictions in this Restrictive Covenant and Easement are in addition to other rights and remedies that may be available, including, but not limited to, administrative and judicial remedies under CERCLA, TSCA or Part 201 of the NREPA.



(b) **Construction.** Any general rule of construction to the contrary notwithstanding, this Restrictive Covenant and Easement shall be liberally construed to achieve the purpose of this Restrictive Covenant and Easement and the policy and purpose of CERCLA and TSCA and the land use restrictions and prospective use limitations required by Part 201. If any provision of this Restrictive Covenant and Easement is found to be ambiguous, an interpretation consistent with the purpose of this Restrictive Covenant and Easement that would render the provision valid shall be favored over any interpretation that would render it invalid.

(c) **Severability.** If any provision of this Restrictive Covenant and Easement is held to be invalid by any court of competent jurisdiction, the invalidity of such provision shall not affect the validity of any other provision hereof, and all other provisions shall continue unimpaired and in full force and effect.

(d) **Entire Agreement.** This Restrictive Covenant and Easement and its attachments and appendices supersedes all prior discussions, negotiations, understandings, or agreements between the undersigned relating to the matters addressed herein, all of which are merged herein.

(e) **Successors.** The covenants, terms, conditions, and restrictions of this Restrictive Covenant and Easement shall be binding upon; and inure to the benefit of, the Grantor and Grantee and their agents, successors, lessees, and assigns and any subsequent title holders, occupants or other persons acquiring an interest in the Property or a relevant sub-portion of the Property, and their respective agents, successors and assigns. The rights, but not the obligations or authorities, of the USEPA are freely assignable to any public entity, subject to the notice to the Grantor, its successors and assigns, as their interests appear in the public title records kept and maintained by the Ingham County Register of Deeds.

14. **Exhibits:** The following exhibits are incorporated into this Restrictive Covenant and Easement:

Exhibit 1 – Legal Description of the CSX Railroad Right of Way Parcel

Parcel Tax Identification Number: 33-01-01-09-281-001

Exhibit 2 – Survey of the Restricted Portion of the Property

Survey E2-1, Limits of Nonresidential Land Use Restrictions

Survey E2-2, Proposed Low-Occupancy Restricted Area within Parcel

Exhibit 3 – Allowable Uses

Nonresidential Land Use Description

Low Occupancy Land Use Description

Exhibit 4 – Permanent Markers

Figure E4-1, Map with Locations of Permanent Markers

15. **Authority to Execute Restrictive Covenant and Easement:** The undersigned person executing this Restrictive Covenant and Easement represents and certifies that he or she is duly authorized and has been empowered to execute this Restrictive Covenant and Easement.

IN WITNESS WHEREOF, **CSXT**, the Grantor, has caused this Restrictive Covenant and Easement to be executed on this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

STATE OF \_\_\_\_\_)  
COUNTY OF \_\_\_\_\_) ss

Acknowledged before me in \_\_\_\_\_ County, Michigan, on \_\_\_\_\_, 2015  
by \_\_\_\_\_.

\_\_\_\_\_  
Notary Public, State of \_\_\_\_\_  
County of \_\_\_\_\_  
My commission expires: \_\_\_\_\_  
Acting in the County of \_\_\_\_\_

The MDEQ approves the form and content of this Restrictive Covenant and Easement on this \_\_\_\_\_ day of \_\_\_\_\_ 2015.

BY: \_\_\_\_\_  
Susan Erickson, Assistant Division Chief  
Remediation and Redevelopment Division  
Department of Environmental Quality

STATE OF \_\_\_\_\_ )  
 )ss  
COUNTY OF \_\_\_\_\_ )

Acknowledged before me in \_\_\_\_\_ County, Michigan, on \_\_\_\_\_, 2015  
by Susan Erickson, Assistant Division Chief, Remediation and Redevelopment Division

\_\_\_\_\_  
Notary Public, State of \_\_\_\_\_  
County of \_\_\_\_\_  
My commission expires: \_\_\_\_\_  
Acting in the County of \_\_\_\_\_

This Document Prepared By:  
Stephen Kohl  
Warner Norcross & Judd, LLP  
2000 Town Center, Ste. 2700  
Southfield, MI 48075-1318

## **Exhibit 1**

### **CSXT Property – Legal Description of CSX Railroad Right of Way Parcel**

Parcel Tax Identification Number: 33-01-01-09-281-001

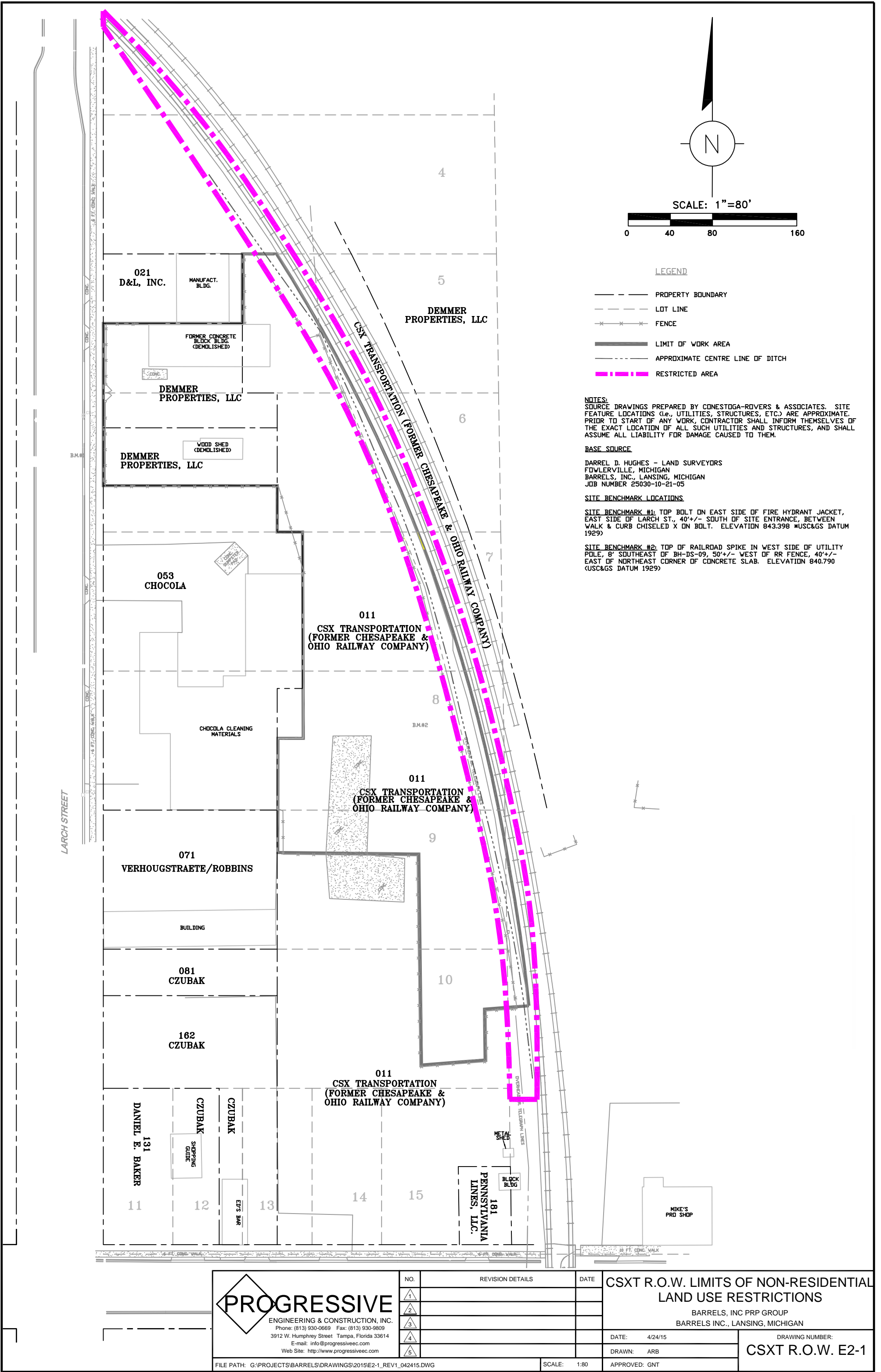
An area of land being adjacent to the easterly property line of the CSX 3.573-acre parcel and being within the CSX Railroad, 66 feet wide, right of way, said ditch area being a part of Block 1, being a part of Lot 3, a part of Lot 4, a part of Lot 5, a part of Lot 6, a part of Lot 7, a part of Lot 8, a part of Lot 9, and a part of Lot 10, of "The Original Plat of the Town of Michigan, now City of Lansing", a subdivision as recorded in Liber 7 of Deeds, Page 593, Ingham County Records, more particularly described by Darrell Hughes, Michigan Registered Land Surveyor No. 19834, as beginning at a point on easterly line of Lot 15, said point being distant North 00 degrees 42 minutes 52 seconds West 138.05 feet, along the easterly line of Lot 15, from the southeast corner of Lot 15; proceeding thence, from said point of beginning, North 00 degrees 42 minutes 52 seconds West 73.70 feet, along a part of the easterly line of Lot 15 and a part of the easterly line of Lot 10; thence, along the westerly right of way line of the CSX Railroad, 869.67 feet, along the arc of a 1523.36 feet radius curve to the left, not tangent with previous course, having a central angle of 32 degrees 42 minutes 34 seconds, whose chord measures 857.91 feet and bears North 19 degrees 59 minutes 09 seconds West; thence North 53 degrees 39 minutes 33 seconds East 7.55 feet; thence 152.72 feet, along the arc of a 1530.91 feet radius curve to the left, having a central angle of 05 degrees 42 minutes 57 seconds, whose chord measures 152.66 feet and bears North 39 degrees 11 minutes 55 seconds West; thence North 00 degrees 03 minutes 28 seconds East 14.85 feet, along a part of the westerly line of Lot 3, being also the easterly line of Larch Street, 82.50 feet wide; thence, the following two courses, along the toe of ballast: 896.63 feet, along the arc of a 1540.91 feet radius curve to the right, having a central angle of 33 degrees 20 minutes 22 seconds, whose chord measures 884.04 feet and bears South 25 degrees 47 minutes 47 seconds East, to a point of common curve; thence 223.34 feet, along the arc of a 1697.13 feet radius curve to the right, having a central angle of 07 degrees 32 minutes 24 seconds, whose chord measures 223.18 feet and bears South 06 degrees 38 minutes 34 seconds East; thence, leaving said toe of ballast, North 89 degrees 52 minutes 58 seconds West 26.00 feet, to the point of beginning, containing 0.436 acres.

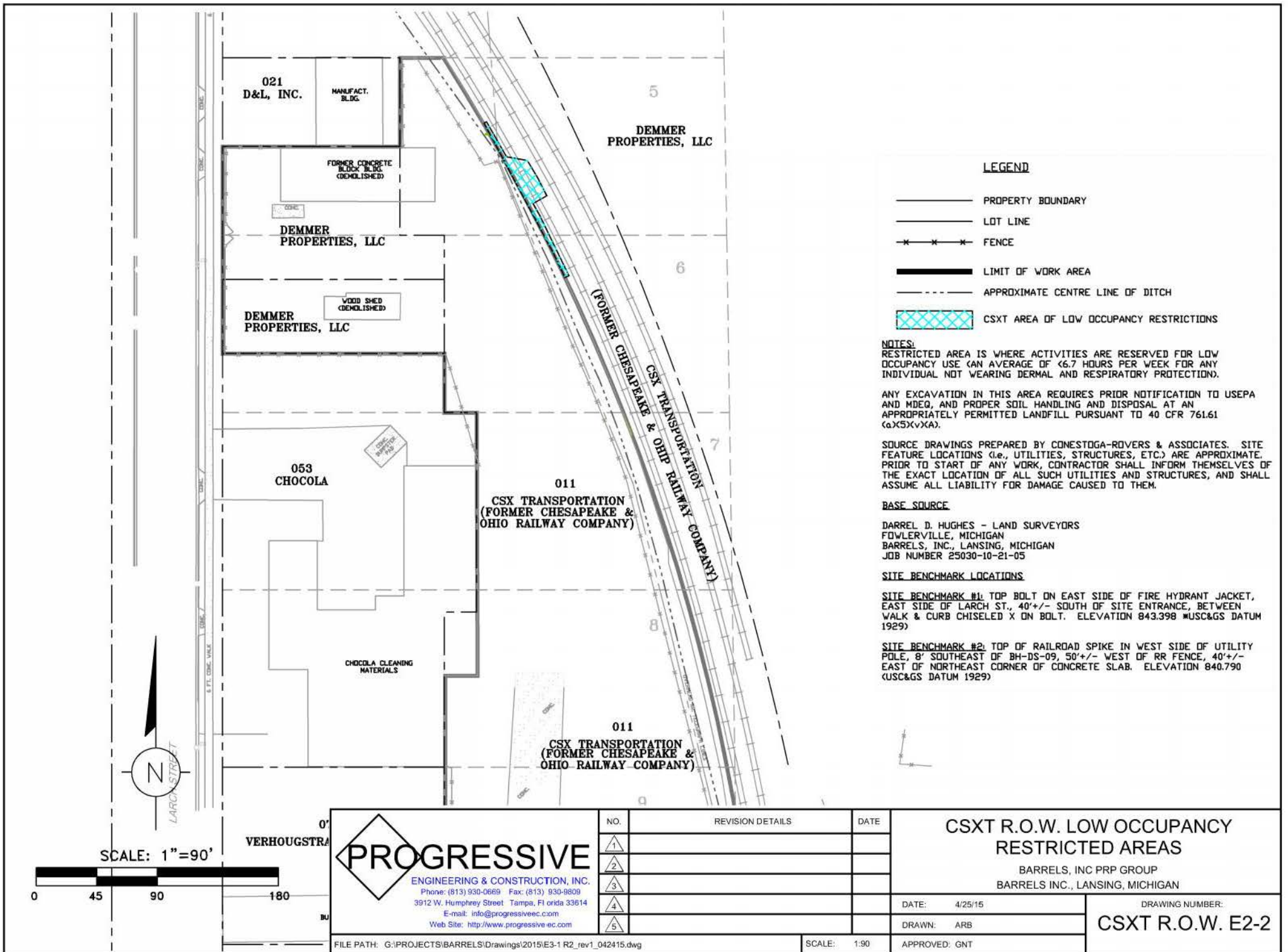
## **Exhibit 2**

### **Surveys of the Property**

**E2-1: Survey of Property Restricted for Groundwater Use and Nonresidential Land Use**

**E2-2: Survey of Low Occupancy Land Use Restricted Areas**







## **Exhibit 3**

### **Allowable Uses**

Nonresidential Land Use: This land use is characterized by any use which is not residential in nature and is primarily characterized by industrial and commercial uses. Industrial uses typically involve manufacturing operations engaged in processing and manufacturing of materials or products. Other examples of industrial uses are utility companies, industrial research and development, and petroleum bulk storage. Commercial uses include any business or income-producing use such as commercial warehouses, lumber yards, retail gas stations, auto dealerships and service stations, as well as office buildings, banks, and medical/dental offices (not including hospitals). Commercial uses also include retail businesses whose principal activity is the sale of food or merchandise within an enclosed building and personal service establishments which perform services indoors such as health clubs, barber/beauty salons, photographic studios, etc.

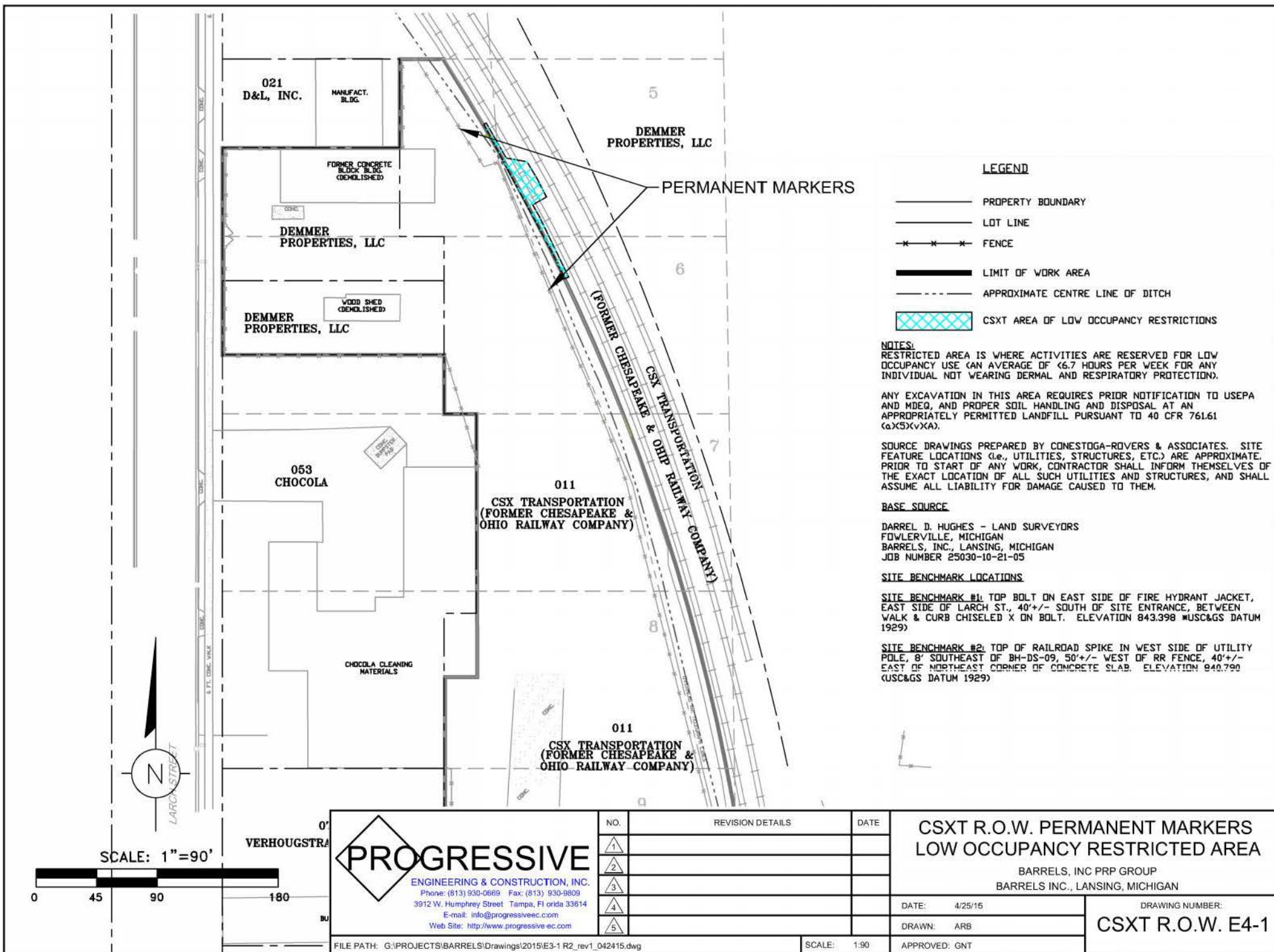
Any residential use is specifically prohibited from the nonresidential land use category. This would include the primary use of the Property for human habitation and includes structures such as single family dwellings, multiple family structures, mobile homes, condominiums, and apartment buildings. Residential use is also characterized by any use which is intended to house, educate, or provide care for children, the elderly, the infirm, or other sensitive populations, and therefore could include day care centers, educational facilities, hospitals, elder care facilities, and nursing homes. The use of any accessory building or portion of an existing building as a dwelling unit permitted for a proprietor or storekeeper and their families, located in the same building as their place of occupation, or for a watchman or caretaker is also prohibited. Any authority that allows for residential use of the Property as a legal non-conforming is also restricted per the prohibitions contained in this Restrictive Covenant and Easement.

Low Occupancy Use: The risk-based cleanup level for total PCBs at the Barrels Site has been established as 16 mg/kg for industrial land use. Soils containing greater than 16 mg/kg of total PCBs have been removed from the Property except in a limited area along the western side of the ROW. Thus a limited area of the Property has been used for PCB remediation waste disposal by definition, and is therefore restricted to low occupancy land use as defined in 40 CFR §761.3. Occupancy by an individual not wearing dermal and respiratory protection on the low-occupancy portion of the Property is limited to an average of less than 6.7 hours per week direct exposure to soils containing greater than 1 mg/kg of PCBs. Any disturbance of soils on the Property within the low occupancy restricted area should be done with caution and should adhere to the requirements for characterization and subsequent management of PCB containing materials under 40 CFR Part 761 as described in Paragraph 2.(f) of this Restrictive Covenant. The limits of the portion of the Property that is restricted to low-occupancy use are shown on Survey E2-2.

## **Exhibit 4**

### **Permanent Markers**

Permanent markers will be placed along the fence line bordering the area where PCB-impacted soils have been left in place along the CSXT right of way warning individuals to avoid the area. If any maintenance or construction activities along the railroad right of way may result in the disturbance of PCB-impacted soils, CSXT will ensure that appropriate health and safety protocols are followed for the protection of workers and the public, and will ensure that all soils are managed in accordance with the requirements of 40 CFR Part 761.61 as described in Paragraph 2.(f) of this Restrictive Covenant. A map showing the locations where permanent markers will be placed is included in this exhibit as Figure E4-1.



## **APPENDIX B**

### **Investigation Derived Waste Disposal Documentation**

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number MID 017 188 873	2. Page 1 of 1	3. Emergency Response Phone (800) 424-9300	4. Manifest Tracking Number 013352625 JJK			
5. Generator's Name and Mailing Address CONESTOGA-ROVERS & ASSOCIATES 14496 SHELDON RD. SUITE 200 ATTN: JAMES VANASSCHE PLYMOUTH, MI 48170 Generator's Phone: (248) 784-5141			Generator's Site Address (if different than mailing address) BARRELS INC. PRP GROUP 1404 N. LARCH STREET LANSING, MI 48206					
6. Transporter 1 Company Name EQ INDUSTRIAL SERVICES			U.S. EPA ID Number MIK 435 642 742					
7. Transporter 2 Company Name			U.S. EPA ID Number					
8. Designated Facility Name and Site Address EQ DETROIT, INC. 1923 FREDERICK DETROIT, MI 48211 Facility's Phone: (313) 347-1300			U.S. EPA ID Number MID 980 991 588					
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
			No.	Type				
	1. NON-REGULATED MATERIAL		002	DM	10	6	029L	
	2. NON-REGULATED MATERIAL		001		055			
	3. NON-REGULATED MATERIAL		001	DM	055	8		
4.								
14. Special Handling Instructions and Additional Information 1. C151001DET / decontamination water 2. C151002DET / soil 3. C151002DET / soil 2/6 323900 684363								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Officer's Printed/Typed Name David Cook			Signature 			Month Day Year 03 23 15		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name Shelton			Signature 			Month Day Year 3 23 15		
Transporter 2 Printed/Typed Name			Signature			Month Day Year		
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number:								
18b. Alternate Facility (or Generator) U.S. EPA ID Number								
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator)						Month Day Year		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. LIW		2. NONE		3. none		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name Brandon Housh			Signature 			Month Day Year 3 23 15		

**WASTE PROFILE FORM**

For assistance in completing this document or for additional information on EQ's service offerings, please visit our website at [www.eqonline.com](http://www.eqonline.com), or call 800-592-5489.

**EQ – The Environmental Quality Company will choose the appropriate facility and method of waste management for your waste from the technologies offered at each EQ operation.**

**If you wish to direct this waste to a specific EQ facility(s) or treatment technology please indicate here:**  
*Detroit*

**Waste Common Name: Soil**

**Section 1 – Generator & Customer Information**

**Generator EPA ID #** MID017188673

Generator Barrels Inc. PRP Group

Facility Address 1404 N. Larch St

City Lansing State MI Zip 48906

**24-hour Emergency Response Number**

Mailing Address Warner Norcross & Judd LLP

2000 Town Center, Suite 2700

City Southfield State MI Zip 48075-1318

Generator Contact Steven Kohl

Title Lead PRP Attorney

Phone 248-784-5141 Fax 248-603-9741

E-mail SKohl@wnj.com

Internal Use Only: EQ Division

EQ Customer No.15909

**Invoicing Company** Progressive Engineering &  
Construction, Inc.

Address 3912 W. Humphrey St

City Tampa State FL Zip 33614

Country U.S.A.

Invoicing Contact Nell Tyner

Phone 813-930-0669 Fax 813-930-9809

Technical Contact Nell Tyner

Phone 813-930-0669 Fax 813-930-9809

Cell Phone

E-mail gntyner@progressiveec.com

**Section 2 – Shipping & Packaging Information**

2.1) Shipping Volume & Frequency:

a) Volume of Waste to be Shipped: 1 DM55

b) Frequency: ☒ One time ☐ Month ☐ Year ☐ Other:

2.2) DOT Information

a) Is this a U.S. Department of Transportation (USDOT) Hazardous Material? ☐ Yes ☒ No

b) If "Yes", indicate the proper shipping name per 49CFR 172.101 Hazardous Materials Table:

0000, NON-REGULATED MATERIAL

**Section 3 – Special Properties**

3.1) Color VARIES

3.2) Odor ☒ None ☐ Ammonia ☐ Amines ☐ Mercaptans ☐ Sulfur ☐ Organic Acid ☐ Amines/Ammonia

☐ Other:

3.3) Consistency at 70°F: ☒ Solid ☐ Dust/Powder ☐ Debris ☐ Sludge ☐ Liquid ☐ Gas/Aerosol ☐ Varies

3.4) What is the pH? ☐ ≤2 ☐ 2.1-4.9 ☒ 5 – 10 ☐ 10.1 – 12.4 ☐ ≥12.5 ☐ N/A

3.5) What is the flash point? ☐ <90°F ☐ 90-139°F ☐ 140-199°F ☒ >200°F ☐ N/A

3.6) Does this waste exhibit any of the following properties? (check all that apply)

- |  |   |  |   |                                      |
|--|---|--|---|--------------------------------------|
| <input checked="" type="checkbox"/> None                         | <input type="checkbox"/> Free Liquids       | <input type="checkbox"/> Metal Fines       | <input type="checkbox"/> Water Reactive   | <input type="checkbox"/> Biohazard   |
| <input type="checkbox"/> Shock Sensitive                         | <input type="checkbox"/> Oily Residue       | <input type="checkbox"/> Dioxins           | <input type="checkbox"/> Furans           | <input type="checkbox"/> Aluminum    |
| <input type="checkbox"/> Asbestos – non-friable                  | <input type="checkbox"/> Asbestos – friable | <input type="checkbox"/> Other Radioactive | <input type="checkbox"/> Air Reactive     | <input type="checkbox"/> Isocyanates |
| <input type="checkbox"/> Biodegradable Sorbents                  | <input type="checkbox"/> Pyrophoric         | <input type="checkbox"/> Reactive Sulfide  | <input type="checkbox"/> Reactive Cyanide | <input type="checkbox"/> Explosives  |
| <input type="checkbox"/> Temperature Controlled Organic Peroxide | <input type="checkbox"/> NORM               | <input type="checkbox"/> TENORM            |   |                                      |

#### Section 4 – Composition and Generating Process

4.1) Provide a physical and chemical composition of the waste (e.g. soil, water, PPE, debris, etc.). List the percent ranges of the material, either estimated or known.

Soil 85 to 90 % to %

Moisture 10 to 15 % to %

to % to %

4.2) Provide a description of the generating process. *Remediation & IDW Sites: please provide a site history.*

Drill cuttings remaining after confirmation soil sampling completed along boundary adjacent to Barrels Inc. Superfund site to confirm excavation of contaminated soils was complete. Potential contaminants of concern in adjacent soils on-site were VOCs, PCBs, and select metals (analytical results provided).

4.3) Are there any known previous handling or treatment issues involving this waste? ☐ Yes\* ☒ No

\*If yes, describe:

#### Section 5 – Hazardous Wastes

As determined by 40 CFR, Part 261 and State Rules:

Please list applicable waste code(s):

5.1) Is this waste exempted from RCRA? ☐ Yes, please provide exemption: ☒ No

5.2) Is this an EPA RCRA listed hazardous waste (F, K, P or U)? ☐ Yes: ☒ No

a) For F006–F009, F012, does this come from a generator that conducts a cyanide plating process? ☐ Yes ☒ No

5.3) Is this an EPA RCRA characteristic hazardous waste (D001-D043)? ☐ Yes: ☒ No

5.4) Do any State Specific Hazardous Waste Codes apply? ☐ Yes: ☒ No

**If you answered 'no' to 5.2, 5.3 and 5.4, please proceed to Section 6.**

5.5) EPA Source Code: EPA Form Code:

5.6) Waste Code Determination Is Based On: ☒ Generator Knowledge ☒ Analysis ☐ MSDS  
*Analysis and/or MSDS may be required for review and approval for hazardous and non-hazardous waste streams.*

5.7) Does this waste exceed Land Disposal Restriction levels? ☐ Yes ☒ No

a) Is this stream a wastewater (WW) or non-wastewater (NWW)?

☐ WW ☒ NWW

b) If this waste stream is greater than 50% soil, does it meet the alternative soil treatment standards of 40CFR 268.49?

☐ Yes ☒ No

c) Does this waste contain greater than 50% debris, by volume?  
(Debris is greater than 2.5 inches in size.)

☐ Yes ☒ No

d) If the debris is larger than 3 ft x 3 ft x 3 ft, please provide the approximate dimensions and weight:

5.8) If this is a characteristic hazardous waste, does it contain Underlying Hazardous Constituents? ☐ Yes\* ☒ No

\*If Yes, please list:

*For a complete list of UHC constituents, please refer to 40 CFR 268.48*



## Section 6 – Non-Hazardous Wastes

Please list applicable waste code(s):

- 6.1) Do any State Specific Non-Hazardous Waste Codes apply? ☐ Yes ☒ No
- 6.2) Is this a Universal (UNIV) waste or a Recyclable Good (RG)? ☐ UNIV ☐ RG ☒ N/A
- 6.3) Is this waste used oil as defined by 40 CFR Part 279? ☐ Yes ☒ No
- a) If yes, is the total halogen content of the used oil waste stream greater than 1,000 ppm? ☐ Yes ☐ No
- b) If yes, what is the source of the halogen content?
- ☐ This is a metalworking oil/fluid containing chlorinated paraffins.
- ☐ This is used oil contaminated with chlorofluorocarbons from refrigeration units.
- ☐ This oil contains halogenated solvents. List specific solvents:
- ☐ Other, describe:

## Section 7 – TSCA Information

- 7.1) What is the concentration of PCBs in the waste? ☒ None ☐ 0-49 ppm ☐ 50-499 ppm ☐ 500+ ppm
- 7.2) Does the waste contain PCB contamination from a source with a concentration  $\geq 50$  ppm? ☐ Yes ☒ No ☐ Unknown  
*If you answered "none" or "0-49 ppm" to 7.1 and "no" to 7.2, please proceed to Section 8.*
- 7.3) Has this waste been processed into a non-liquid form? ☐ Yes\* ☐ No
- \*If yes, what was the concentration of PCBs prior to processing? ☐ 0-499 ppm ☐ 500+ ppm
- 7.4) Is this non-liquid PCB waste in the form of soil, rags, debris, or other contaminated media? ☐ Yes ☐ No
- 7.5) Are you a PCB capacitor manufacturer or a PCB equipment manufacturer? ☐ Yes ☐ No
- 7.6) Has the PCB Article (e.g., transformer, hydraulic machine, PCB-contaminated electrical equipment) been drained/flushed of all PCBs and decontaminated in accordance with 40 CFR 761.60(b)? ☐ N/A ☐ Yes ☐ No

## Section 8 – Clean Air Act Information

- 8.1) Is this waste subject to regulation under 40 CFR, Part 264, Subpart CC (VOC > 500 ppmw)? ☐ Yes ☒ No
- 8.2) Is this waste subject to regulation under 40 CFR, Part 63, Subpart DD (VOHAP > 500 ppmw)? ☐ Yes ☒ No
- 8.3) Is the site, or waste, subject to any other NESHAP/MACT standard(s)? ☐ Yes\* ☒ No

\*If Yes this document serves as notification that this waste contains chemicals, required to be managed in accordance with Part ☐ 61 ☐ 62 ☐ 63 Subpart of NESHAP/MACT standards.

- 8.4) Does this waste stream contain Benzene? ☐ Yes ☒ No

*If you answered "no" to 8.4, please proceed to Section 9.*

- 8.5) Does the waste stream come from a facility subject to 40 CFR 61, Subpart FF (Benzene NESHAP)?

☐ Yes, please provide the SIC/NAICS code: ☐ No

*If you answered "no" to questions 8.5, please proceed to Section 9.*

- 8.6) Does your facility manage the waste subject to Benzene NESHAP in a manner other than shipping off-site?

☐ Yes, please specify: ☐ No

- 8.7) Is the generating source of this waste a facility with Total Annual Benzene (TAB)  $\geq 10$  Mg/year? ☐ Yes ☐ No

- 8.8) Does the waste contain >10% water? ☐ Yes ☐ No

- 8.9) What is the TAB quantity for your facility? Mg/Year

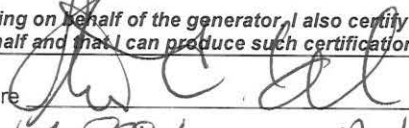
- 8.10) What is the total Benzene concentration in your waste? Percent or ppmw.

**Supporting analysis must be attached. Do not use TCLP analytical results. Acceptable laboratory methods include 8020, 8240, 8260, 602 and 624.**

## Section 9 – Certification

I certify that all information (including attachments) is complete and factual and is an accurate representation of the known and suspected hazards, pertaining to the waste described herein. I authorize EQ's personnel to add supplemental information to the waste approval file, provided I am contacted and give verbal permission. I authorize EQ's personnel to obtain a sample from any waste shipment for purposes of verification and confirmation. I agree that, if EQ approves the waste described herein, all such wastes that are transported, delivered, or tendered to EQ by Generator or on Generator's behalf shall be subject to, and Generator shall be bound by, the attached Standard Terms and Conditions.

*If I am an agent acting on behalf of the generator, I also certify that I have permission to sign any and all waste characterization paperwork on the generator's behalf and that I can produce such certification in writing upon request.*

Generator Signature  Printed Name Steven C. Kohl

Company Barrick Inc. PRP Group Title Regional Representative Date 2/25/15



## STANDARD TERMS AND CONDITIONS

The Agreement between the Customer and EQ – The Environmental Quality Company and/or its member companies (hereinafter “EQ”) related to or associated with Delivered Waste, as herein defined, shall be governed by the following Standard Terms and Conditions in addition to the terms and conditions contained in any Waste Profile Form, Customer Approval Quote Confirmation, Generator Approval Notification, Notice of Waste Approval Expiration, and/or Credit Agreement associated with such Delivered Waste.

The Customer may use its standard forms (such as purchase orders, acknowledgments of orders, and invoices) to administer its dealings under this Agreement for convenience purposes, but all provisions thereof in conflict with these terms and conditions shall be deemed stricken.

### **Definitions**

The following definitions shall apply for purposes of this Agreement:

“**Acceptable Waste**” shall mean any hazardous waste, as defined under applicable State or federal law, determined by EQ as acceptable for treatment and/or disposal in accordance with this Agreement.

“**Delivered Wastes**” shall mean all wastes (i) which are transported, delivered, or tendered to EQ by the Customer; (ii) which the Customer has arranged for the transport, delivery or tender to EQ; or (iii) ) which are transported, delivered, or tendered to EQ under a Credit Agreement between the Customer and EQ.

“**Non-Conforming Wastes**” shall mean wastes that (a) are not in accordance in all material respects with the warranties, descriptions, specifications or limitations stated in the Waste Profile Form and this Agreement; (b) have constituents or components of a type or concentration not specifically identified in the Waste Profile Form (i) which increase the nature or extent of the hazard and risk undertaken by EQ in treating and/or disposing of the waste, or (ii) for whose treatment and/or disposal a Waste Management Facility is not designed or permitted, or (iii) which increase the cost of treatment and/or disposal of waste beyond that specified in EQ's price quote; or (c) are not properly packaged, labeled, described, or placarded, or otherwise not in compliance with United States Department of Transportation and United States Environmental Protection Agency regulations.

### **Control of Operations**

EQ shall have sole control over all aspects of the operation of any treatment and/or disposal facility of EQ receiving Delivered Wastes under this Agreement (hereinafter, “Waste Management Facility”), including, without limitation, maintaining EQ's desired volume of Acceptable Wastes being delivered to any Waste Management Facility by the Customer or any other person or entity.

### **Identification of Waste**

For each waste material to be transported, delivered, or tendered to EQ under this Agreement, the Customer shall provide, or cause to be provided, to EQ a representative sample of the waste material and a completed Waste Profile Form containing a physical and chemical description or analysis of such waste material, which description shall conform with any and all guidelines for waste acceptance provided by EQ. On the basis of EQ's analysis of such representative sample of the waste material and such Waste Profile Form, EQ will determine whether such wastes are Acceptable Wastes. EQ does not make any guarantee that it will handle any waste material or any particular quantity or type of waste material, and EQ reserves the right to the decline to transport, treat and/or dispose of waste material. The Customer shall promptly furnish to EQ any information regarding known, suspected or planned changes in the composition of the waste material. Further, the Customer shall promptly inform EQ of any change in the characteristic or condition of the waste material which becomes known to the Customer subsequent to the date of the Waste Profile Form.

### **Non-Conforming Wastes**

In the event that EQ at any time discovers that any Delivered Waste is Non-Conforming Waste, EQ may reject or revoke its acceptance of the Non-Conforming Waste. The Customer shall have seven (7) days to direct an alternative lawful manner of disposition of the waste, unless it is necessary by reason of law or otherwise to move the Non-Conforming Waste prior to expiration of the seven (7) day period. If the Customer does not direct an alternative disposal, at its option, EQ may return any such Non-Conforming Wastes to the Customer, and the Customer shall pay or reimburse EQ for all costs and expenses incurred by EQ in connection with the receipt, handling, sampling, analyses, transportation and return to the Customer of such Non-Conforming Wastes. If it is impossible or impractical for EQ to return the Non-Conforming Waste to the Customer, the Customer shall reimburse EQ for all costs, of any type or nature whatsoever, incurred by EQ, solely because such Delivered Waste was Non-Conforming Waste (including, but not limited to, all costs associated with any remedial steps necessary, due to the nature of the Non-Conforming Waste, in connection with material with which the Non-Conforming Waste may have been commingled and all expenses and charges for analyzing, handling, locating, preparing for transporting, storing and disposing of any Non-Conforming Waste).

### **Customer Warranty - Acceptable Wastes**

All Delivered Wastes shall be Acceptable Wastes and shall conform in all material respects to the description and specifications contained in the Waste Profile Form. The information set forth in the Waste Profile Form or any manifest, placard or label associated with any Delivered Wastes, or otherwise represented by the Customer or the generator (if other than the Customer) to EQ, is and shall be true, accurate and complete as of the date of receipt of the involved waste by EQ.

### **Customer Warranty - Title to Wastes**

Either the Customer or the generator (if other than the Customer) shall hold clear title, free of any all liens, claims, encumbrances, and charges to Delivered Waste until such waste is accepted by EQ.

### **Customer Warranty - Compliance with Laws**

The Customer shall comply with all applicable federal, state and local environmental statutes, regulations, and other governmental requirements, as well as directives issued by EQ from time to time, governing the transportation, treatment and/or disposal of Acceptable Wastes, including, but not limited to, all packaging, manifesting, containerization, placarding and labeling requirements.

### **Customer Warranty - Updating Information**

If the Customer receives information that Delivered Waste or other hazardous waste described in the Waste Profile Form, or some component of such waste, presents or may present a hazard or risk to persons, property or the environment which was not disclosed to EQ, or if the Customer or generator (if other than the Customer) has changed the process by which such waste results, the Customer shall promptly report such information to EQ in writing.

### **Customer Indemnity**

The Customer shall indemnify, defend and hold harmless EQ, and its affiliated or related companies, and all of their respective present or future officers, directors, shareholders, employees and agents from and against any and all losses, damages, liabilities, penalties, fines, forfeitures, demands, claims, causes of action, suits, costs and expenses (including, but not limited to, reasonable costs of defense, settlement, and reasonable attorneys' fees), which may be asserted against any or all of them by any person or any governmental agency, or which any or all of them may hereafter suffer, incur, be responsible for or pay out, as a result of or in connection with bodily injuries (including, but not limited to, death, sickness, disease and emotional or mental distress) to any person (including EQ's employees), damage (including, but not limited to, loss of use) to any property (public or private), or any requirements to conduct or incur expense for investigative, removal or remedial expenses in connection with contamination of or adverse effect on the environment, or any violation or alleged violation of any statutes, ordinances, orders, rules or regulations of any governmental entity or agency, caused or arising out of (i) a breach of this Agreement by the Customer, (ii) the failure of any warranty of the Customer to be true, accurate and complete, or (iii) any willful or negligent act or omission of the Customer, or its employees or agents in connection with the performance of this Agreement.

### **Force Majeure**

EQ shall not be liable for any failure to accept, receive, handle, treat, and/or dispose of Delivered Waste due to an act of God, fire, casualty, flood, war, strike, lockout, labor trouble, failure of public utilities, equipment failure, facility shutdown, injunction, accident, epidemic, riot, insurrection, destruction of operation or transportation facilities, the inability to procure materials, equipment, or sufficient personnel or energy in order to meet operational needs without the necessity of allocation, the failure or inability to obtain any governmental approvals or to meet Environmental Requirements (including, but not limited to voluntary or involuntary compliance with any act, exercise, assertion, or requirement of any governmental authority) which may temporarily or permanently prohibit operations of EQ, the Customer, or the Generator, or any other circumstances beyond the control of EQ which prevents or delays performance of any of its obligations under this Agreement.

### **Governing Laws**

This Agreement shall in all respects be governed by and shall be construed in accordance with the laws of the State of Michigan applied to contracts executed and performed wholly within such state.

### **Bulk Disposal Charges**

Quoted bulk disposal charges for solid materials will be billed by the cubic yard, if the waste density is less than 2,000lbs./cubic yard. If waste density is greater than 2,000 lbs./cubic yard, then bulk disposal charges will be billed by the ton, regardless of the approved container.

**WASTE PROFILE FORM**

For assistance in completing this document or for additional information on EQ's service offerings, please visit our website at [www.eqonline.com](http://www.eqonline.com), or call 800-592-5489.

**EQ – The Environmental Quality Company will choose the appropriate facility and method of waste management for your waste from the technologies offered at each EQ operation.**

**If you wish to direct this waste to a specific EQ facility(s) or treatment technology please indicate here:**  
*Detroit*

**Waste Common Name: Decontamination water**

**Section 1 – Generator & Customer Information**

**Generator EPA ID #** MID017188673

Generator Barrels Inc. PRP Group

Facility Address 1404 N. Larch St

City Lansing State MI Zip 48906

**24-hour Emergency Response Number**

Mailing Address Warner Norcross & Judd LLP

2000 Town Center, Suite 2700

City Southfield State MI Zip 48075-1318

Generator Contact Steven Kohl

Title Lead PRP Attorney

Phone 248-784-5141 Fax 248-603-9741

E-mail SKohl@wnj.com

Internal Use Only: EQ Division

EQ Customer No.15909

**Invoicing Company** Progressive Engineering &  
Construction, Inc.

Address 3912 W. Humphrey St

City Tampa State FL Zip 33614

Country U.S.A.

Invoicing Contact Nell Tyner

Phone 813-930-0669 Fax 813-930-9809

Technical Contact Nell Tyner

Phone 813-930-0669 Fax 813-930-9809

Cell Phone

E-mail gntyner@progressiveec.com

**Section 2 – Shipping & Packaging Information**

2.1) Shipping Volume & Frequency:

a) Volume of Waste to be Shipped: 1 DM55

b) Frequency: ☒ One time ☐ Month ☐ Year ☐ Other:

2.2) DOT Information

a) Is this a U.S. Department of Transportation (USDOT) Hazardous Material? ☐ Yes ☒ No

b) If "Yes", indicate the proper shipping name per 49CFR 172.101 Hazardous Materials Table:

0000, NON-REGULATED MATERIAL

**Section 3 – Special Properties**

3.1) Color VARIES

3.2) Odor ☒ None ☐ Ammonia ☐ Amines ☐ Mercaptans ☐ Sulfur ☐ Organic Acid ☐ Amines/Ammonia  
☐ Other:

3.3) Consistency at 70°F: ☐ Solid ☐ Dust/Powder ☐ Debris ☐ Sludge ☒ Liquid ☐ Gas/Aerosol ☐ Varies

3.4) What is the pH? ☐ ≤2 ☐ 2.1-4.9 ☒ 5 – 10 ☐ 10.1 – 12.4 ☐ ≥12.5 ☐ N/A

3.5) What is the flash point? ☐ <90°F ☐ 90-139°F ☐ 140-199°F ☒ >200°F ☒ N/A

3.6) Does this waste exhibit any of the following properties? (check all that apply)

- |  |  |  |   |                                      |
|--|--|--|---|--------------------------------------|
| <input type="checkbox"/> None                                    | <input checked="" type="checkbox"/> Free Liquids | <input type="checkbox"/> Metal Fines       | <input type="checkbox"/> Water Reactive   | <input type="checkbox"/> Biohazard   |
| <input type="checkbox"/> Shock Sensitive                         | <input type="checkbox"/> Oily Residue            | <input type="checkbox"/> Dioxins           | <input type="checkbox"/> Furans           | <input type="checkbox"/> Aluminum    |
| <input type="checkbox"/> Asbestos – non-friable                  | <input type="checkbox"/> Asbestos – friable      | <input type="checkbox"/> Other Radioactive | <input type="checkbox"/> Air Reactive     | <input type="checkbox"/> Isocyanates |
| <input type="checkbox"/> Biodegradable Sorbents                  | <input type="checkbox"/> Pyrophoric              | <input type="checkbox"/> Reactive Sulfide  | <input type="checkbox"/> Reactive Cyanide | <input type="checkbox"/> Explosives  |
| <input type="checkbox"/> Temperature Controlled Organic Peroxide | <input type="checkbox"/> NORM                    | <input type="checkbox"/> TENORM            |   |                                      |

#### Section 4 – Composition and Generating Process

4.1) Provide a physical and chemical composition of the waste (e.g. soil, water, PPE, debris, etc.). List the percent ranges of the material, either estimated or known.

Water 98 to 99 % to %

Sediment 1 to 2 % to %

to % to %

4.2) Provide a description of the generating process. *Remediation & IDW Sites: please provide a site history.*

Decon water from cleaning drilling rig/sampling equipment used to collect soil samples along boundary adjacent to Barrels Inc. Superfund site to confirm excavation of contaminated soils was complete. Potential contaminants of concern in adjacent soils on-site were VOCs, PCBs, and select metals.

4.3) Are there any known previous handling or treatment issues involving this waste? ☐ Yes\* ☒ No

\*If yes, describe:

#### Section 5 – Hazardous Wastes

As determined by 40 CFR, Part 261 and State Rules:

Please list applicable waste code(s):

5.1) Is this waste exempted from RCRA? ☐ Yes, please provide exemption: ☒ No

5.2) Is this an EPA RCRA listed hazardous waste (F, K, P or U)? ☐ Yes: ☒ No

a) For F006–F009, F012, does this come from a generator that conducts a cyanide plating process? ☐ Yes ☒ No

5.3) Is this an EPA RCRA characteristic hazardous waste (D001-D043)? ☐ Yes: ☒ No

5.4) Do any State Specific Hazardous Waste Codes apply? ☐ Yes: ☒ No

**If you answered 'no' to 5.2, 5.3 and 5.4, please proceed to Section 6.**

5.5) EPA Source Code: EPA Form Code:

5.6) Waste Code Determination Is Based On: ☒ Generator Knowledge ☒ Analysis ☐ MSDS  
*Analysis and/or MSDS may be required for review and approval for hazardous and non-hazardous waste streams.*

5.7) Does this waste exceed Land Disposal Restriction levels? ☐ Yes ☒ No

a) Is this stream a wastewater (WW) or non-wastewater (NWW)?

☐ WW ☒ NWW

b) If this waste stream is greater than 50% soil, does it meet the alternative soil treatment standards of 40CFR 268.49?

☐ Yes ☒ No

c) Does this waste contain greater than 50% debris, by volume? (Debris is greater than 2.5 inches in size.)

☐ Yes ☒ No

d) If the debris is larger than 3 ft x 3 ft x 3 ft, please provide the approximate dimensions and weight:

5.8) If this is a characteristic hazardous waste, does it contain Underlying Hazardous Constituents? ☐ Yes\* ☒ No

\*If Yes, please list:

*For a complete list of UHC constituents, please refer to 40 CFR 268.48*

## Section 6 – Non-Hazardous Wastes

Please list applicable waste code(s):

- 6.1) Do any State Specific Non-Hazardous Waste Codes apply? ☒ Yes ☐ No 029I
- 6.2) Is this a Universal (UNIV) waste or a Recyclable Good (RG)? ☐ UNIV ☐ RG ☒ N/A
- 6.3) Is this waste used oil as defined by 40 CFR Part 279? ☐ Yes ☒ No
- a) If yes, is the total halogen content of the used oil waste stream greater than 1,000 ppm? ☐ Yes ☐ No
- b) If yes, what is the source of the halogen content?
- ☐ This is a metalworking oil/fluid containing chlorinated paraffins.
- ☐ This is used oil contaminated with chlorofluorocarbons from refrigeration units.
- ☐ This oil contains halogenated solvents. List specific solvents:
- ☐ Other, describe:

## Section 7 – TSCA Information

- 7.1) What is the concentration of PCBs in the waste? ☒ None ☐ 0-49 ppm ☐ 50-499 ppm ☐ 500+ ppm
- 7.2) Does the waste contain PCB contamination from a source with a concentration  $\geq 50$  ppm? ☐ Yes ☒ No ☐ Unknown  
*If you answered "none" or "0-49 ppm" to 7.1 and "no" to 7.2, please proceed to Section 8.*
- 7.3) Has this waste been processed into a non-liquid form? ☐ Yes\* ☐ No  
\*If yes, what was the concentration of PCBs prior to processing? ☐ 0-499 ppm ☐ 500+ ppm
- 7.4) Is this non-liquid PCB waste in the form of soil, rags, debris, or other contaminated media? ☐ Yes ☐ No
- 7.5) Are you a PCB capacitor manufacturer or a PCB equipment manufacturer? ☐ Yes ☐ No
- 7.6) Has the PCB Article (e.g., transformer, hydraulic machine, PCB-contaminated electrical equipment) been drained/flushed of all PCBs and decontaminated in accordance with 40 CFR 761.60(b)? ☐ N/A ☐ Yes ☐ No

## Section 8 – Clean Air Act Information

- 8.1) Is this waste subject to regulation under 40 CFR, Part 264, Subpart CC (VOC > 500 ppmw)? ☐ Yes ☒ No
- 8.2) Is this waste subject to regulation under 40 CFR, Part 63, Subpart DD (VOHAP > 500 ppmw)? ☐ Yes ☒ No
- 8.3) Is the site, or waste, subject to any other NESHAP/MACT standard(s)? ☐ Yes\* ☒ No

\*If Yes this document serves as notification that this waste contains chemicals, required to be managed in accordance with Part ☐ 61 ☐ 62 ☐ 63 Subpart of NESHAP/MACT standards.

- 8.4) Does this waste stream contain Benzene? ☐ Yes ☒ No  
*If you answered "no" to 8.4, please proceed to Section 9.*

8.5) Does the waste stream come from a facility subject to 40 CFR 61, Subpart FF (Benzene NESHAP)?

☐ Yes, please provide the SIC/NAICS code: ☐ No

*If you answered "no" to questions 8.5, please proceed to Section 9.*

8.6) Does your facility manage the waste subject to Benzene NESHAP in a manner other than shipping off-site?

☐ Yes, please specify: ☐ No

8.7) Is the generating source of this waste a facility with Total Annual Benzene (TAB)  $\geq 10$  Mg/year? ☐ Yes ☐ No

8.8) Does the waste contain >10% water? ☐ Yes ☐ No

8.9) What is the TAB quantity for your facility? Mg/Year

8.10) What is the total Benzene concentration in your waste? Percent or ppmw.

**Supporting analysis must be attached. Do not use TCLP analytical results. Acceptable laboratory methods include 8020, 8240, 8260, 602 and 624.**

## Section 9 – Certification

I certify that all information (including attachments) is complete and factual and is an accurate representation of the known and suspected hazards, pertaining to the waste described herein. I authorize EQ's personnel to add supplemental information to the waste approval file, provided I am contacted and give verbal permission. I authorize EQ's personnel to obtain a sample from any waste shipment for purposes of verification and confirmation. I agree that, if EQ approves the waste described herein, all such wastes that are transported, delivered, or tendered to EQ by Generator or on Generator's behalf shall be subject to, and Generator shall be bound by, the attached Standard Terms and Conditions.

*If I am an agent acting on behalf of the generator, I also certify that I have permission to sign any and all waste characterization paperwork on the generator's behalf and that I can produce such certification in writing upon request.*

Generator Signature [Signature] Printed Name Steven C. Kohl

Company Bonnes Inc. PRP Contractor Title Authorized Representative Date 2/25/15



Wednesday, October 29, 2014

Fibertec Project Number: 64820  
Project Identification: Barrels (P2316) /P2316  
Submittal Date: 10/15/2014

Dr. G. Nell Tyner  
Progressive Engineering & Construction, Inc.  
3912 W. Humphrey Street  
Tampa, FL 33614

Dear Dr. Tyner,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 14 days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl P. Strandbergh". The signature is fluid and cursive, with a large, stylized "D" and "S".

Daryl P. Strandbergh  
Laboratory Director

DPS/cdh  
Enclosures

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8660 S. Mackinaw Trail

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T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>Preburn</b>	Chain of Custody:	<b>136281</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>1</b>	Collect Date:	<b>10/15/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>10:37</b>
Sample Comments:	<b>Soil results have been calculated and reported on a dry weight basis unless otherwise noted.</b>				
Definitions:	Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.				

Dry Weight Determination (ASTM D 2974-87)						Aliquot ID: 64820-001		Matrix: Soil/Solid		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	15		%	0.1	1.0	10/27/14	MC141027	10/28/14	MC141027	KRF

RCRA Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)						Aliquot ID: 64820-001		Matrix: Soil/Solid		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	3000		µg/kg	100	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
2. Barium	54000		µg/kg	1000	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
3. Cadmium	56		µg/kg	50	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
4. Chromium	9200		µg/kg	500	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
5. Lead	5600		µg/kg	1000	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
6. Selenium	U		µg/kg	200	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
7. Silver	U		µg/kg	100	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH

Mercury by CVAAS (EPA 7471B)						Aliquot ID: 64820-001		Matrix: Soil/Solid		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		µg/kg	50	9.0	10/28/14	PM14J28A	10/29/14	M614J29A	JLH

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)						Aliquot ID: 64820-001		Matrix: Soil/Solid		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035A/EPA 8260B)						Aliquot ID: 64820-001A		Matrix: Soil/Solid		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD

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F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>Preburn</b>	Chain of Custody:	<b>136281</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>1</b>	Collect Date:	<b>10/15/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>10:37</b>
Sample Comments:	<b>Soil results have been calculated and reported on a dry weight basis unless otherwise noted.</b>				
Definitions:	Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.				

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035A/EPA 8260B)						Aliquot ID: 64820-001A		Matrix: Soil/Solid		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 2. Acrylonitrile	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
3. Benzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
4. Bromobenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
5. Bromochloromethane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
6. Bromodichloromethane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
7. Bromoform	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
8. Bromomethane	U		µg/kg	200	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
9. 2-Butanone	U		µg/kg	750	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
10. n-Butylbenzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
11. sec-Butylbenzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
12. tert-Butylbenzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
13. Carbon Disulfide	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
14. Carbon Tetrachloride	U		µg/kg	59	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
15. Chlorobenzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
16. Chloroethane	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
17. Chloroform	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
18. Chloromethane	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
19. 2-Chlorotoluene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
20. Dibromochloromethane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
‡ 21. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	59	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
22. Dibromomethane	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
28. 1,2-Dichloroethane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
32. 1,2-Dichloropropane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
33. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
35. Ethylbenzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
36. Ethylene Dibromide	U		µg/kg	59	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
37. 2-Hexanone	U		µg/kg	2500	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
38. Isopropylbenzene	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
39. Methylene Chloride	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD

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F: (231) 775-8584



Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>Preburn</b>	Chain of Custody:	<b>136281</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>1</b>	Collect Date:	<b>10/15/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>10:37</b>
Sample Comments: <b>Soil results have been calculated and reported on a dry weight basis unless otherwise noted.</b>					
Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.					

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035A/EPA 8260B)						Aliquot ID: 64820-001A		Matrix: Soil/Solid		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 40. 2-Methylnaphthalene	U		µg/kg	330	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
41. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
42. MTBE	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
43. Naphthalene	U		µg/kg	330	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
44. n-Propylbenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
45. Styrene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
48. Tetrachloroethene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
49. Toluene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
50. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
53. Trichloroethene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
54. Trichlorofluoromethane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
59. Vinyl Chloride	U		µg/kg	40	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
60. m&p-Xylene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
61. o-Xylene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
62. Xylenes	U		µg/kg	150	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD

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Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>Preburn</b>	Chain of Custody:	<b>136281</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>2</b>	Collect Date:	<b>10/15/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Wastewater</b>	Collect Time:	<b>11:20</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Trace Elements by ICP/MS, Total Recoverable (EPA 0200.8-M/EPA 0200.8)						Aliquot ID: 64820-002A		Matrix: Wastewater		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Antimony	U		mg/L	0.0020	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
2. Arsenic	U		mg/L	0.0050	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
3. Barium	0.12		mg/L	0.10	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
4. Cadmium	U		mg/L	0.0010	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
5. Chromium	0.054		mg/L	0.010	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
6. Lead	0.074		mg/L	0.0030	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
7. Selenium	U		mg/L	0.0050	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
8. Silver	U		mg/L	0.00020	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH

Mercury by CVAAS, Total (EPA 0245.1)						Aliquot ID: 64820-002A		Matrix: Wastewater		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		mg/L	0.00020	1.0	10/29/14	PM14J29A	10/29/14	M614J29B	JLH

Volatile Organic Compounds by GC/MS (EPA 0624)						Aliquot ID: 64820-002		Matrix: Wastewater		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		mg/L	0.050	1.0	10/27/14	VB14J27A	10/27/14	VB14J27A	JPL
2. Acrylonitrile	U		mg/L	0.0020	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
3. Benzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 4. Bromobenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 5. Bromochloromethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
6. Bromodichloromethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
7. Bromoform	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
8. Bromomethane	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 9. 2-Butanone	U		mg/L	0.025	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 10. n-Butylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 11. sec-Butylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 12. tert-Butylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 13. Carbon Disulfide	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
14. Carbon Tetrachloride	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
15. Chlorobenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
16. Chloroethane	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
17. Chloroform	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
18. Chloromethane	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 19. 2-Chlorotoluene	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL

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Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>Preburn</b>	Chain of Custody:	<b>136281</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>2</b>	Collect Date:	<b>10/15/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Wastewater</b>	Collect Time:	<b>11:20</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds by GC/MS (EPA 0624)**

**Aliquot ID: 64820-002**

**Matrix: Wastewater**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
20. Dibromochloromethane	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 21. 1,2-Dibromo-3-chloropropane (SIM)	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 22. Dibromomethane	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
23. 1,2-Dichlorobenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
24. 1,3-Dichlorobenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
25. 1,4-Dichlorobenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 26. Dichlorodifluoromethane	U		mg/L	0.0050	1.0	10/27/14	VB14J27A	10/27/14	VB14J27A	JPL
27. 1,1-Dichloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
28. 1,2-Dichloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
29. 1,1-Dichloroethene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 30. cis-1,2-Dichloroethene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
31. trans-1,2-Dichloroethene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
32. 1,2-Dichloropropane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
33. cis-1,3-Dichloropropene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
34. trans-1,3-Dichloropropene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
35. Ethylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 36. Ethylene Dibromide	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 37. 2-Hexanone	U		mg/L	0.050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 38. Isopropylbenzene	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
39. Methylene Chloride	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 40. 2-Methylnaphthalene	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 41. 4-Methyl-2-pentanone	U		mg/L	0.050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 42. MTBE	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 43. Naphthalene	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 44. n-Propylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 45. Styrene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 46. 1,1,1,2-Tetrachloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
47. 1,1,2,2-Tetrachloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
48. Tetrachloroethene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
49. Toluene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 50. 1,2,4-Trichlorobenzene	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
51. 1,1,1-Trichloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
52. 1,1,2-Trichloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
53. Trichloroethene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
54. Trichlorofluoromethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 55. 1,2,3-Trichloropropane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 56. 1,2,3-Trimethylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 57. 1,2,4-Trimethylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL

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Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>Preburn</b>	Chain of Custody:	<b>136281</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>2</b>	Collect Date:	<b>10/15/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Wastewater</b>	Collect Time:	<b>11:20</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds by GC/MS (EPA 0624)						Aliquot ID: 64820-002		Matrix: Wastewater		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 58. 1,3,5-Trimethylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
59. Vinyl Chloride	U		mg/L	0.0010	1.0	10/27/14	VB14J27A	10/27/14	VB14J27A	JPL
‡ 60. m&p-Xylene	U		mg/L	0.0020	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 61. o-Xylene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 62. Xylenes	U		mg/L	0.0030	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL

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**Definitions/ Qualifiers:**

- A:** Spike recovery or precision unusable due to dilution.  
**B:** The analyte was detected in the associated method blank.  
**E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.  
**J:** The concentration is an estimated value.  
**M:** Modified Method  
**U:** The analyte was not detected at or above the reporting limit.  
**X:** Matrix Interference has resulted in a raised reporting limit or distorted result.  
**W:** Results reported on a wet-weight basis.  
**\*:** Value reported is outside QA limits

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**Exception Summary:**

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Accreditation Number(s):

**E-10395 (KS)**

**T104704518-13-1 (TX)**

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Wednesday, November 19, 2014

Fibertec Project Number: 65299  
Project Identification: Barrels (P2316) /P2316  
Submittal Date: 11/13/2014

Dr. G. Nell Tyner  
Progressive Engineering & Construction, Inc.  
3912 W. Humphrey Street  
Tampa, FL 33614

Dear Dr. Tyner,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 14 days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl P. Strandbergh". The signature is fluid and stylized, with a large, sweeping flourish at the end.

Daryl P. Strandbergh  
Laboratory Director

DPS/cdh

Enclosures

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Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>IDW Water</b>	Chain of Custody:	<b>138308</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>1</b>	Collect Date:	<b>11/13/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Wastewater</b>	Collect Time:	<b>12:00</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) (EPA 0608)						Aliquot ID: 65299-001		Matrix: Wastewater		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Aroclor-1016	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
2. Aroclor-1221	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
3. Aroclor-1232	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
4. Aroclor-1242	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
5. Aroclor-1248	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
6. Aroclor-1254	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
7. Aroclor-1260	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
‡ 8. Aroclor-1262	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
‡ 9. Aroclor-1268	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC

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Brighton, MI 48116  
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T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

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**Definitions/ Qualifiers:**

- A:** Spike recovery or precision unusable due to dilution.  
**B:** The analyte was detected in the associated method blank.  
**E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.  
**J:** The concentration is an estimated value.  
**M:** Modified Method  
**U:** The analyte was not detected at or above the reporting limit.  
**X:** Matrix Interference has resulted in a raised reporting limit or distorted result.  
**W:** Results reported on a wet-weight basis.  
**\*:** Value reported is outside QA limits

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**Exception Summary:**

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Accreditation Number(s):

**E-10395 (KS)**

**T104704518-13-1 (TX)**

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F: (231) 775-8584



Wednesday, November 12, 2014

Fibertec Project Number: 64820 Supplemental  
Project Identification: Barrels (P2316) /P2316  
Submittal Date: 10/15/2014

Dr. G. Nell Tyner  
Progressive Engineering & Construction, Inc.  
3912 W. Humphrey Street  
Tampa, FL 33614

Dear Dr. Tyner,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 14 days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl Strandbergh". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Daryl P. Strandbergh  
Laboratory Director

DPS/dps

Enclosures

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Analytical Laboratory Report  
Laboratory Project Number: 64820  
Laboratory Sample Number: 64820-001

Order: 64820  
Page: 2 of 3  
Date: 11/12/14

Client Identification:	Progressive Engineering & Construction, Inc.	Sample Description:	Preburn	Chain of Custody:	
Client Project Name:	Barrels (P2316)	Sample No:	1	Collect Date:	10/15/14
Client Project No:	P2316	Sample Matrix:	Soil/Solid	Collect Time:	10:37
Sample Comments:	Soil results have been calculated and reported on a dry weight basis unless otherwise noted.				
Definitions:	Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.				

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)						Aliquot ID: 64820-001B		Matrix: Soil/Solid		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Antimony	540		µg/kg	300	20	11/11/14	PT14K11E	11/12/14	T414K12A	JLH

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**Definitions/ Qualifiers:**

- A:** Spike recovery or precision unusable due to dilution.  
**B:** The analyte was detected in the associated method blank.  
**E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.  
**J:** The concentration is an estimated value.  
**M:** Modified Method  
**U:** The analyte was not detected at or above the reporting limit.  
**X:** Matrix Interference has resulted in a raised reporting limit or distorted result.  
**W:** Results reported on a wet-weight basis.  
**\*:** Value reported is outside QA limits

---

**Exception Summary:**

---



Accreditation Number(s):

**E-10395 (KS)**

**T104704518-13-1 (TX)**

---

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## STANDARD TERMS AND CONDITIONS

The Agreement between the Customer and EQ – The Environmental Quality Company and/or its member companies (hereinafter “EQ”) related to or associated with Delivered Waste, as herein defined, shall be governed by the following Standard Terms and Conditions in addition to the terms and conditions contained in any Waste Profile Form, Customer Approval Quote Confirmation, Generator Approval Notification, Notice of Waste Approval Expiration, and/or Credit Agreement associated with such Delivered Waste.

The Customer may use its standard forms (such as purchase orders, acknowledgments of orders, and invoices) to administer its dealings under this Agreement for convenience purposes, but all provisions thereof in conflict with these terms and conditions shall be deemed stricken.

### **Definitions**

The following definitions shall apply for purposes of this Agreement:

“**Acceptable Waste**” shall mean any hazardous waste, as defined under applicable State or federal law, determined by EQ as acceptable for treatment and/or disposal in accordance with this Agreement.

“**Delivered Wastes**” shall mean all wastes (i) which are transported, delivered, or tendered to EQ by the Customer; (ii) which the Customer has arranged for the transport, delivery or tender to EQ; or (iii) which are transported, delivered, or tendered to EQ under a Credit Agreement between the Customer and EQ.

“**Non-Conforming Wastes**” shall mean wastes that (a) are not in accordance in all material respects with the warranties, descriptions, specifications or limitations stated in the Waste Profile Form and this Agreement; (b) have constituents or components of a type or concentration not specifically identified in the Waste Profile Form (i) which increase the nature or extent of the hazard and risk undertaken by EQ in treating and/or disposing of the waste, or (ii) for whose treatment and/or disposal a Waste Management Facility is not designed or permitted, or (iii) which increase the cost of treatment and/or disposal of waste beyond that specified in EQ’s price quote; or (c) are not properly packaged, labeled, described, or placarded, or otherwise not in compliance with United States Department of Transportation and United States Environmental Protection Agency regulations.

### **Control of Operations**

EQ shall have sole control over all aspects of the operation of any treatment and/or disposal facility of EQ receiving Delivered Wastes under this Agreement (hereinafter, “Waste Management Facility”), including, without limitation, maintaining EQ’s desired volume of Acceptable Wastes being delivered to any Waste Management Facility by the Customer or any other person or entity.

### **Identification of Waste**

For each waste material to be transported, delivered, or tendered to EQ under this Agreement, the Customer shall provide, or cause to be provided, to EQ a representative sample of the waste material and a completed Waste Profile Form containing a physical and chemical description or analysis of such waste material, which description shall conform with any and all guidelines for waste acceptance provided by EQ. On the basis of EQ’s analysis of such representative sample of the waste material and such Waste Profile Form, EQ will determine whether such wastes are Acceptable Wastes. EQ does not make any guarantee that it will handle any waste material or any particular quantity or type of waste material, and EQ reserves the right to decline to transport, treat and/or dispose of waste material. The Customer shall promptly furnish to EQ any information regarding known, suspected or planned changes in the composition of the waste material. Further, the Customer shall promptly inform EQ of any change in the characteristic or condition of the waste material which becomes known to the Customer subsequent to the date of the Waste Profile Form.

### **Non-Conforming Wastes**

In the event that EQ at any time discovers that any Delivered Waste is Non-Conforming Waste, EQ may reject or revoke its acceptance of the Non-Conforming Waste. The Customer shall have seven (7) days to direct an alternative lawful manner of disposition of the waste, unless it is necessary by reason of law or otherwise to move the Non-Conforming Waste prior to expiration of the seven (7) day period. If the Customer does not direct an alternative disposal, at its option, EQ may return any such Non-Conforming Wastes to the Customer, and the Customer shall pay or reimburse EQ for all costs and expenses incurred by EQ in connection with the receipt, handling, sampling, analyses, transportation and return to the Customer of such Non-Conforming Wastes. If it is impossible or impractical for EQ to return the Non-Conforming Waste to the Customer, the Customer shall reimburse EQ for all costs, of any type or nature whatsoever, incurred by EQ, solely because such Delivered Waste was Non-Conforming Waste (including, but not limited to, all costs associated with any remedial steps necessary, due to the nature of the Non-Conforming Waste, in connection with material with which the Non-Conforming Waste may have been commingled and all expenses and charges for analyzing, handling, locating, preparing for transporting, storing and disposing of any Non-Conforming Waste).

### **Customer Warranty - Acceptable Wastes**

All Delivered Wastes shall be Acceptable Wastes and shall conform in all material respects to the description and specifications contained in the Waste Profile Form. The information set forth in the Waste Profile Form or any manifest, placard or label associated with any Delivered Wastes, or otherwise represented by the Customer or the generator (if other than the Customer) to EQ, is and shall be true, accurate and complete as of the date of receipt of the involved waste by EQ.

### **Customer Warranty - Title to Wastes**

Either the Customer or the generator (if other than the Customer) shall hold clear title, free of any all liens, claims, encumbrances, and charges to Delivered Waste until such waste is accepted by EQ.

### **Customer Warranty - Compliance with Laws**

The Customer shall comply with all applicable federal, state and local environmental statutes, regulations, and other governmental requirements, as well as directives issued by EQ from time to time, governing the transportation, treatment and/or disposal of Acceptable Wastes, including, but not limited to, all packaging, manifesting, containerization, placarding and labeling requirements.

### **Customer Warranty - Updating Information**

If the Customer receives information that Delivered Waste or other hazardous waste described in the Waste Profile Form, or some component of such waste, presents or may present a hazard or risk to persons, property or the environment which was not disclosed to EQ, or if the Customer or generator (if other than the Customer) has changed the process by which such waste results, the Customer shall promptly report such information to EQ in writing.

### **Customer Indemnity**

The Customer shall indemnify, defend and hold harmless EQ, and its affiliated or related companies, and all of their respective present or future officers, directors, shareholders, employees and agents from and against any and all losses, damages, liabilities, penalties, fines, forfeitures, demands, claims, causes of action, suits, costs and expenses (including, but not limited to, reasonable costs of defense, settlement, and reasonable attorneys’ fees), which may be asserted against any or all of them by any person or any governmental agency, or which any or all of them may hereafter suffer, incur, be responsible for or pay out, as a result of or in connection with bodily injuries (including, but not limited to, death, sickness, disease and emotional or mental distress) to any person (including EQ’s employees), damage (including, but not limited to, loss of use) to any property (public or private), or any requirements to conduct or incur expense for investigative, removal or remedial expenses in connection with contamination of or adverse effect on the environment, or any violation or alleged violation of any statutes, ordinances, orders, rules or regulations of any governmental entity or agency, caused or arising out of (i) a breach of this Agreement by the Customer, (ii) the failure of any warranty of the Customer to be true, accurate and complete, or (iii) any willful or negligent act or omission of the Customer, or its employees or agents in connection with the performance of this Agreement.

### **Force Majeure**

EQ shall not be liable for any failure to accept, receive, handle, treat, and/or dispose of Delivered Waste due to an act of God, fire, casualty, flood, war, strike, lockout, labor trouble, failure of public utilities, equipment failure, facility shutdown, injunction, accident, epidemic, riot, insurrection, destruction of operation or transportation facilities, the inability to procure materials, equipment, or sufficient personnel or energy in order to meet operational needs without the necessity of allocation, the failure or inability to obtain any governmental approvals or to meet Environmental Requirements (including, but not limited to voluntary or involuntary compliance with any act, exercise, assertion, or requirement of any governmental authority) which may temporarily or permanently prohibit operations of EQ, the Customer, or the Generator, or any other circumstances beyond the control of EQ which prevents or delays performance of any of its obligations under this Agreement.

### **Governing Laws**

This Agreement shall in all respects be governed by and shall be construed in accordance with the laws of the State of Michigan applied to contracts executed and performed wholly within such state.

### **Bulk Disposal Charges**

Quoted bulk disposal charges for solid materials will be billed by the cubic yard, if the waste density is less than 2,000lbs./cubic yard. If waste density is greater than 2,000 lbs./cubic yard, then bulk disposal charges will be billed by the ton, regardless of the approved container.

## **APPENDIX C**

### **Laboratory Analytical Reports**



Wednesday, October 22, 2014

Fibertec Project Number: 64683  
Project Identification: Barrels (P2316) /P2316  
Submittal Date: 10/14/2014

Dr. G. Nell Tyner  
Progressive Engineering & Construction, Inc.  
3912 W. Humphrey Street  
Tampa, FL 33614

Dear Dr. Tyner,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 14 days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl P. Strandbergh".

Daryl P. Strandbergh  
Laboratory Director

DPS/atd

Enclosures

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F: (517) 699-0388  
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F: (231) 775-8584

Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>P2316-West-01-02</b>	Chain of Custody:	<b>136266</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>1</b>	Collect Date:	<b>10/14/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>10:50</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-001**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	<b>14</b>		<b>%</b>	<b>0.1</b>	<b>1.0</b>	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-001**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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F: (231) 775-8584

Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West-01-04</b>	Chain of Custody: <b>136266</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>2</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:50</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: 64683-002

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	18		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: 64683-002

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-004

Order: 64683  
Page: 4 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-02-02** Chain of Custody: **136266**  
Client Project Name: **Barrels (P2316)** Sample No: **4** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **10:55**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-004**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	<b>16</b>		<b>%</b>	<b>0.1</b>	<b>1.0</b>	10/15/14	MC14J1015	10/16/14	MC14J1015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-004**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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F: (231) 775-8584



Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>P2316-West-02-04</b>	Chain of Custody:	<b>136266</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>5</b>	Collect Date:	<b>10/14/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>10:55</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: 64683-005

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	16		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: 64683-005

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-007

Order: 64683  
Page: 6 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-03-02** Chain of Custody: **136266**  
Client Project Name: **Barrels (P2316)** Sample No: **7** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **11:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-007**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	21		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-007**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-008

Order: 64683  
Page: 7 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-03-04** Chain of Custody: **136266**  
Client Project Name: **Barrels (P2316)** Sample No: **8** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **11:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-008**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	15		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-008**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-010

Order: 64683  
Page: 8 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-04-02** Chain of Custody: **136266**  
Client Project Name: **Barrels (P2316)** Sample No: **10** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **11:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-010**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	17		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-010**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-011

Order: 64683  
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Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-04-04** Chain of Custody: **136267**  
Client Project Name: **Barrels (P2316)** Sample No: **11** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **11:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-011**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	19		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-011**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West-05-02</b>	Chain of Custody: <b>136267</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>13</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>11:13</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-013**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	22		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-013**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1018	U		µg/kg	430	25	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
2. Aroclor-1221	U		µg/kg	430	25	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
3. Aroclor-1232	U		µg/kg	430	25	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
4. Aroclor-1242	U		µg/kg	430	25	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
5. Aroclor-1248	U		µg/kg	430	25	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
6. Aroclor-1254	2800		µg/kg	430	25	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
7. Aroclor-1260	U		µg/kg	430	25	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 8. Aroclor-1262	U		µg/kg	430	25	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 9. Aroclor-1268	U		µg/kg	430	25	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA

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Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West-05-04</b>	Chain of Custody: <b>136267</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>14</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>11:13</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: 64683-014

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	18		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: 64683-014

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-016

Order: 64683  
Page: 12 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-06-02** Chain of Custody: **136267**  
Client Project Name: **Barrels (P2316)** Sample No: **16** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **11:20**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not Included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-016**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
# 1. Percent Moisture (Water Content)	20		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-016**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	8300	500	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
2. Aroclor-1221	U		µg/kg	8300	500	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
3. Aroclor-1232	U		µg/kg	8300	500	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
4. Aroclor-1242	U		µg/kg	8300	500	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
5. Aroclor-1248	U		µg/kg	8300	500	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
6. Aroclor-1254	85000		µg/kg	8300	500	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
7. Aroclor-1260	U		µg/kg	8300	500	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
# 8. Aroclor-1262	U		µg/kg	8300	500	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
# 9. Aroclor-1268	U		µg/kg	8300	500	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-017

Order: 64683  
Page: 13 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-06-04** Chain of Custody: **136267**  
Client Project Name: **Barrels (P2316)** Sample No: **17** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **11:20**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)

Aliquot ID: 64683-017

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	19		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)

Aliquot ID: 64683-017

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
6. Aroclor-1254	1100		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA

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Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West-07-02</b>	Chain of Custody: <b>136267</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>19</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>11:25</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-019**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	22		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-019**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
6. Aroclor-1254	550		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA

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Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West-07-04</b>	Chain of Custody: <b>136267</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>20</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>11:25</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not Included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: **64683-020**

Matrix: **Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	<b>18</b>		<b>%</b>	<b>0.1</b>	<b>1.0</b>	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: **64683-020**

Matrix: **Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West-08-02</b>	Chain of Custody: <b>136268</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>22</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>12:26</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: 64683-022

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	17		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: 64683-022

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
6. Aroclor-1254	150		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA

Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West-08-04</b>	Chain of Custody: <b>136268</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>23</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>12:26</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-023**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	17		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-023**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA



**Analytical Laboratory Report**  
**Laboratory Project Number: 64683**  
**Laboratory Sample Number: 64683-025**

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Page: 18 of 35  
Date: 10/22/14

Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>P2316-West-09-02</b>	Chain of Custody:	<b>136268</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>25</b>	Collect Date:	<b>10/14/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>12:32</b>
Sample Comments: <b>Soil results have been calculated and reported on a dry weight basis unless otherwise noted.</b>					
Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.					

Dry Weight Determination (ASTM D 2974-87)					Aliquot ID: 64683-025		Matrix: Soil/Solid			
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	17		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)						Aliquot ID: 64683-025		Matrix: Soil/Solid		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
6. Aroclor-1254	340		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA

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Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West-09-04</b>	Chain of Custody: <b>136268</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>26</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>12:32</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: **64683-026**

Matrix: **Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	<b>20</b>		<b>%</b>	<b>0.1</b>	<b>1.0</b>	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: **64683-026**

Matrix: **Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1248	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West-10-02</b>	Chain of Custody: <b>136268</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>28</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>12:38</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: 64683-028

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	4.6		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: 64683-028

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
6. Aroclor-1254	310		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/17/14	SA14J17B	BDA



Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West-10-04</b>	Chain of Custody: <b>136268</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>29</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>12:38</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: 64683-029

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	20		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: 64683-029

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
5. Aroclor-1246	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/16/14	PS14J16C	10/16/14	SB14J16A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-031

Order: 64683  
Page: 22 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-11-02** Chain of Custody: **136269**  
Client Project Name: **Barrels (P2316)** Sample No: **31** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **12:43**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)

Aliquot ID: 64683-031

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	16		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)

Aliquot ID: 64683-031

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
6. Aroclor-1254	100		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-032

Order: 64683  
Page: 23 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-11-04** Chain of Custody: **136269**  
Client Project Name: **Barrels (P2316)** Sample No: **32** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **12:43**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)

Aliquot ID: 64683-032

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	18		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)

Aliquot ID: 64683-032

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-034

Order: 64683  
Page: 24 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-12-02** Chain of Custody: **136269**  
Client Project Name: **Barrels (P2316)** Sample No: **34** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **12:49**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-034**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	20		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-034**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA

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**Analytical Laboratory Report**  
**Laboratory Project Number: 64683**  
**Laboratory Sample Number: 64683-035**

Order: 64683  
Page: 25 of 35  
Date: 10/22/14

Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>P2316-West-12-04</b>	Chain of Custody:	<b>136269</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>35</b>	Collect Date:	<b>10/14/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>12:49</b>
Sample Comments: <b>Soil results have been calculated and reported on a dry weight basis unless otherwise noted.</b>					
Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.					

Dry Weight Determination (ASTM D 2974-87)					Aliquot ID: 64683-035		Matrix: Soil/Solid			
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	16		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)					Aliquot ID: 64683-035		Matrix: Soil/Solid			
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-037

Order: 64683  
Page: 26 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-13-02** Chain of Custody: **136269**  
Client Project Name: **Barrels (P2316)** Sample No: **37** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **12:56**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

**Allquot ID: 64683-037**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	7.4		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Allquot ID: 64683-037**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
6. Aroclor-1254	140		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-038

Order: 64683  
Page: 27 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-13-04** Chain of Custody: **136269**  
Client Project Name: **Barrels (P2316)** Sample No: **38** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **12:56**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: 64683-038

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	17		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: 64683-038

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-040

Order: 64683  
Page: 28 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-14-02** Chain of Custody: **136269**  
Client Project Name: **Barrels (P2316)** Sample No: **40** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **13:02**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-040**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	18		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-040**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/21/14	SB14J20A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/21/14	SB14J20A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/21/14	SB14J20A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/21/14	SB14J20A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/21/14	SB14J20A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/21/14	SB14J20A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/21/14	SB14J20A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/21/14	SB14J20A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/21/14	SB14J20A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-041

Order: 64683  
Page: 29 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West-14-04** Chain of Custody: **136270**  
Client Project Name: **Barrels (P2316)** Sample No: **41** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **13:02**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: 64683-041

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	11		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: 64683-041

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA

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Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West-MS MSD1</b>	Chain of Custody: <b>136274</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>85</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>11:00</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: 64683-085

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	20		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: 64683-085

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/20/14	SA14J20A	BDA

Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>P2316-West-MS MSD2</b>	Chain of Custody:	<b>136274</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>86</b>	Collect Date:	<b>10/14/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>11:15</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-086**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	17		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-086**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA

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Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-West Dup01</b>	Chain of Custody: <b>136274</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>87</b>	Collect Date: <b>10/14/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:55</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-087**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	16		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-087**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA

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Analytical Laboratory Report  
Laboratory Project Number: 64683  
Laboratory Sample Number: 64683-088

Order: 64683  
Page: 33 of 35  
Date: 10/22/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-West Dup02** Chain of Custody: **136274**  
Client Project Name: **Barrels (P2316)** Sample No: **88** Collect Date: **10/14/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **11:20**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-088**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	15		%	0.1	1.0	10/15/14	MC141015	10/16/14	MC141015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-088**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SB14J17A	BDA

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Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>P2316-West Dup03</b>	Chain of Custody:	<b>136274</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>89</b>	Collect Date:	<b>10/14/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>12:38</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64683-089**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	15		%	0.1	1.0	10/15/14	MC14J1015	10/16/14	MC14J1015	THW

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64683-089**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SA14J17B	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SA14J17B	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SA14J17B	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SA14J17B	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SA14J17B	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SA14J17B	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SA14J17B	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SA14J17B	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/17/14	PS14J17B	10/17/14	SA14J17B	BDA



**Definitions/ Qualifiers:**

- A: Spike recovery or precision unusable due to dilution.  
B: The analyte was detected in the associated method blank.  
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.  
J: The concentration is an estimated value.  
M: Modified Method  
U: The analyte was not detected at or above the reporting limit.  
X: Matrix Interference has resulted in a raised reporting limit or distorted result.  
W: Results reported on a wet-weight basis.  
\*: Value reported is outside QA limits

**Exception Summary:**



Accreditation Number(s):

**E-10395 (KS)**

**T104704518-13-1 (TX)**

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Quality Control Report  
Matrix Spike Summary  
Laboratory Project Number: 64683

Order: 64683  
Page: 1 of 3  
Date: 11/11/14

Client Identification: Progressive Engineering & Construction, Inc.

Client Project Name: Barrels (P2316)

Client Project No: P2316

Sample Comments: Soil results have been calculated and reported on a dry weight basis unless otherwise noted.

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)

Matrix: Soil/Solid

Parent Sample:	64683-085	Description:	P2316-West-MS MSD1	Sample No:	85	Collect Date:	10/14/14	11:00
MS Sample ID:	64683-085A	Description:	P2316-West-MS MSD1	Sample No:	85	Collect Date:	10/14/14	11:00
MSD Sample ID:	64683-085B	Description:	P2316-West-MS MSD1	Sample No:	85	Collect Date:	10/14/14	11:00

Parameter(s)	Result	Units	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	MS/MSD LCL - UCL	RPD %	RPD UCL
1. Aroclor-1016	<133	µg/kg(wet)	667	544	527	82	79	60 - 122	4	30
2. Aroclor-1260	<133	µg/kg(wet)	667	538	549	81	82	70 - 131	1	30

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Quality Control Report  
Matrix Spike Summary  
Laboratory Project Number: 64683

Order: 64683  
Page: 2 of 3  
Date: 11/11/14

Client Identification: Progressive Engineering & Construction, Inc.

Client Project Name: Barrels (P2316)

Client Project No: P2316

Sample Comments: Soil results have been calculated and reported on a dry weight basis unless otherwise noted.

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)

Matrix: Soil/Solid

Parent Sample:	64683-086	Description:	P2316-West-MS MSD2	Sample No:	86	Collect Date:	10/14/14	11:15
MS Sample ID:	64683-086A	Description:	P2316-West-MS MSD2	Sample No:	86	Collect Date:	10/14/14	11:15
MSD Sample ID:	64683-086B	Description:	P2316-West-MS MSD2	Sample No:	86	Collect Date:	10/14/14	11:15

Parameter(s)	Result	Units	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	MS/MSD LCL - UCL	RPD %	RPD UCL
1. Aroclor-1016	<133	µg/kg(wet)	667	590	540	88	81	60 - 122	5	30
2. Aroclor-1260	<133	µg/kg(wet)	667	595	570	89	86	70 - 131	3	30

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Definitions/Qualifiers:

- A: Spike recovery or precision unusable due to dilution.  
B: The analyte was detected in the associated method blank.  
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.  
J: The concentration is an estimated value.  
M: Modified Method  
U: The analyte was not detected at or above the reporting limit.  
X: Matrix Interference has resulted in a raised reporting limit or distorted result.  
W: Results reported on a wet-weight basis.  
\*: Value reported is outside QA limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Laboratory Approval:



Laboratory Approval

Daryl P. Strandbergh  
Laboratory Director



Laboratory Approval

Thomas Boocher  
Quality Assurance Officer



Accreditation Number:

**E-10395**

**Quality Control Report**  
**Preparation Batch QC Summary**  
**Gas Chromatography - Electron Capture Detector**  
**Soil/Solid**

Batch ID: PS14J16C  
Page: 1 of 1  
Date: 11/04/14

Preparation Batch: PS14J16C      Preparation Date: 10/16/14

Parameter	Method Blank (MB)				Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result µg/kg	RL µg/kg		Q	Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Aroclor-1016	U	100			880	1,333	66	60 - 122						MB-1	LCS-1	
2. Aroclor-1260	U	100			941	1,333	71	70 - 131						MB-1	LCS-1	

System Monitoring Compounds (Surrogates):	Method Blank (MB)				Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result µg/kg	Spike µg/kg	Rec. %	Q	Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Decachlorobiphenyl-PCB(S)	50.0	66.7	75		41.7	66.7	63	40 - 143						MB-1	LCS-1	
2. 2,4,5,6-Tetrachloro-m-xylene-PCB(S)	49.4	66.7	74		43.9	66.7	66	42 - 133						MB-1	LCS-1	

**Definitions/ Qualifiers:**

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

**Run Code (Analysis Sequence/Run Time):**

MB-1    SA14J16B    10/16/14 16:56  
LCS-1    SA14J16B    10/16/14 17:11

**Exception Summary:**

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

**Report Generated By:**



**Anthony Donnelly**  
Information Technology Officer  
Tuesday, November 04, 2014  
9:33:42 AM



Quality Control Report  
Preparation Batch QC Summary  
Gas Chromatography - Electron Capture Detector  
Soil/Solid

Batch ID: PS14J17B  
Page: 1 of 1  
Date: 11/04/14

Preparation Batch: PS14J17B

Preparation Date: 10/17/14

Parameter	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result	RL		Result	Spike	Rec.	LCL - UCL		Rec.	RPD	UCL		MB	LCS	LCD
	µg/kg	µg/kg	Q	µg/kg	µg/kg	%	%	Q	%	%	%	Q			
1. Aroclor-1016	U	100		936	1,333	70	60 - 122						MB-2	LCS-2	
2. Aroclor-1260	U	100		967	1,333	73	70 - 131						MB-2	LCS-2	
System Monitoring Compounds (Surrogates):	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result	Spike	Rec.	Result	Spike	Rec.	LCL - UCL		Rec.	RPD	UCL		MB	LCS	LCD
	µg/kg	µg/kg	%	Q	µg/kg	µg/kg	%	%	Q	%	%	%	Q		
1. Decachlorobiphenyl-PCB(S)	51.3	66.7	77		59.5	66.7	89	40 - 143					MB-2	LCS-2	
2. 2,4,5,6-Tetrachloro-m-xylene-PCB(S)	48.7	66.7	73		47.2	66.7	71	42 - 133					MB-2	LCS-2	

Definitions/Qualifiers:

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-2 SB14J20A 10/20/14 16:53  
LCS-2 SB14J20A 10/20/14 17:13

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Anthony Donnelly  
Information Technology Officer  
Tuesday, November 04, 2014  
9:33:42 AM

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8660 S. Mackinaw Trail

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Chain of Custody #  
**136266**  
PAGE 1 of 10

Client Name: <b>Progressive Eng. &amp; Const</b>				PARAMETERS												Turnaround		Matrix Code		Deliverables	
Contact Person: <b>Nell Tyner</b>																24 hour RUSH (surcharge applies)		<input checked="" type="checkbox"/> Soil <input checked="" type="checkbox"/> GW Ground Water		<input type="checkbox"/> Level 2	
Project Name/ Number: <b>Barrels - P2316</b>																48 hour RUSH (surcharge applies)		<input type="checkbox"/> Air <input type="checkbox"/> SW Surface Water		<input type="checkbox"/> Level 3	
QUOTE#																72 hour RUSH (surcharge applies)		<input type="checkbox"/> Oil <input type="checkbox"/> WW Waste Water		<input type="checkbox"/> Level 4	
Purchase Order#				Standard (5-7 bus. days)		<input checked="" type="checkbox"/> Wipe <input type="checkbox"/> X Other: Specify		<input type="checkbox"/> EDD													
Lab Sample #				Other: Specify		<input type="checkbox"/> FES Drilling Services															
Date				Time		Client Sample #		Client Sample Descriptor		MATRIX (SEE RIGHT CORNER FOR CODE)		# OF CONTAINERS		PRESERVED (Y/N)		Remarks:					
10/14/14				1050				P2316 - West - 01-02		S		1		N							
10/14/14				1050				P2316 - West - 01-04		S		1		N							
10/14/14				1050				P2316 - West - 01-06		S		1		N		hold					
10/14/14				1055				P2316 - West - 02-02		S		1		N							
10/14/14				1055				P2316 - West - 02-04		S		1		N							
10/14/14				1055				P2316 - West - 02-06		S		1		N		hold					
10/14/14				1055/1100				P2316 - West - 03-02		S		1		N							
10/14/14				1055/1100				P2316 - West - 03-04		S		1		N							
10/14/14				1055/1100				P2316 - West - 03-06		S		1		N		hold					
10/14/14				1110				P2316 - West - 04-02		S		1		N							
Comments: results to: NTyner@progressivecc.com & CNichols@progressivecc.com																					
Relinquished By: <i>[Signature]</i>								Date/ Time: 10/14/14				Received By: <i>[Signature]</i> 15:30									
Relinquished By: <i>[Signature]</i>								Date/ Time: 10/14/14 10:15				Received By: <i>[Signature]</i>									
Relinquished By:								Date/ Time:				Received By Laboratory:									
LAB USE ONLY:																					
Fibertec project number:																					
Laboratory Tracking:																					
Temperature at Receipt: <b>5.6°C</b>																					

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Chain of Custody #  
**136267**  
PAGE 2 of 10

Client Name: <u>Progressive Eng &amp; Constr</u>				MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)	<u>PCB</u>	PARAMETERS												Turnaround		Matrix Code		Deliverables	
Contact Person: <u>Nell Turner</u>								<input checked="" type="checkbox"/> 24 hour RUSH (surcharge applies) <input type="checkbox"/> 48 hour RUSH (surcharge applies) <input type="checkbox"/> 72 hour RUSH (surcharge applies) <input checked="" type="checkbox"/> Standard (5-7 bus. days) <input type="checkbox"/> Other: Specify _____	<input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> EDD	<input type="checkbox"/> FES Drilling Services															
Project Name/ Number: <u>P2316 - Barrels</u>																									
QUOTE# _____																									
Purchase Order# _____								Remarks: _____																	
LAB Sample #	Date	Time	Client Sample #	Client Sample Descriptor																					
	10/14/14	1110		P2316 - West - 04-04	S	1	N	1																	
	10/14/14	1110		P2316 - West - 04-06	S	1	N	1											hold						
	10/14/14	1113		P2316 - West - 05-02	S	1	N	1																	
	10/14/14	1113		P2316 - West - 05-04	S	1	N	1																	
	10/14/14	1113		P2316 - West - 05-06	S	1	N	1											hold						
	10/14/14	1120		P2316 - West - 06-02	S	1	N	1																	
	10/14/14	1120		P2316 - West - 06-04	S	1	N	1																	
	10/14/14	1120		P2316 - West - 06-06	S	1	N	1											hold						
	10/14/14	1125		P2316 - West - 07-02	S	1	N	1																	
	10/14/14	1125		P2316 - West - 07-04	S	1	N	1																	
Comments:																									
Relinquished By: <u>[Signature]</u>					Date/ Time: <u>10/14/14</u>					Received By: <u>[Signature]</u> <u>15:30</u>															
Relinquished By: <u>[Signature]</u>					Date/ Time: <u>10/14/14 16:19</u>					Received By: <u>[Signature]</u>															
Relinquished By: _____					Date/ Time: _____					Received By Laboratory: _____															
LAB USE ONLY: Fibertec project number: Laboratory Tracking: Temperature at Receipt: <u>5.6°C</u>																									

64683  
TERMS & CONDITIONS ON BACK

COC Revision: February, 2013

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Chain of Custody #  
**136268**  
PAGE 3 of 10

Client Name: <b>Progressive Eng. &amp; Const.</b>				MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)	<b>PCB</b>	PARAMETERS												Turnaround	Matrix Code	Deliverables
Contact Person: <b>Nell Turner</b>								24 hour RUSH (surcharge applies)	<input checked="" type="checkbox"/> Soil	<input type="checkbox"/> GW	Ground Water	<input type="checkbox"/> Level 2										
Project Name/ Number: <b>P2316</b>								48 hour RUSH (surcharge applies)	<input type="checkbox"/> Air	<input type="checkbox"/> SW	Surface Water	<input type="checkbox"/> Level 3										
QUOTE#								72 hour RUSH (surcharge applies)	<input type="checkbox"/> Oil	<input type="checkbox"/> WW	Waste Water	<input type="checkbox"/> Level 4										
Purchase Order#								<input checked="" type="checkbox"/> Standard (5-7 bus. days)												<input type="checkbox"/> Other: Specify	<input type="checkbox"/> FES Drilling Services	<input type="checkbox"/> EDD
Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor													Remarks:					
	10/14/14	1225		P2316 - West - 07 - 06	S	I	N	I									hold					
	10/14/14	1226		P2316 - West - 08 - 02	S	I	N	I														
	10/14/14	1226		P2316 - West - 08 - 04	S	I	N	I														
	10/14/14	1226		P2316 - West - 08 - 06	S	I	N	I									hold					
	10/14/14	1232		P2316 - West - 09 - 02	S	I	N	I														
	10/14/14	1232		P2316 - West - 09 - 04	S	I	N	I														
	10/14/14	1232		P2316 - West - 09 - 06	S	I	N	I									hold					
	10/14/14	1238		P2316 - West - 10 - 02	S	I	N	I														
	10/14/14	1238		P2316 - West - 10 - 04	S	I	N	I														
	10/14/14	1238		P2316 - West - 10 - 06	S	I	N	I									hold					
Comments:																						
Relinquished By:					Date/ Time: 10/14/14				Received By:  15:30													
Relinquished By:					Date/ Time: 10/14/14 16:15				Received By:													
Relinquished By:					Date/ Time:				Received By Laboratory:													
LAB USE ONLY:																						
Fibertec project number:																						
Laboratory Tracking: <b>64683</b>																						
Temperature at Receipt: <b>5.6°C</b>																						

TERMS & CONDITIONS ON BACK

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**ICE**  
COC Revision: February, 2013



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Chain of Custody #  
**136269**  
PAGE 4 of 10

Client Name: <u>Progressive Eng &amp; Const.</u>				PARAMETERS												Turnaround		Matrix Code		Deliverables			
Contact Person: <u>Nell Tynar</u>				<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">MATRIX (SEE RIGHT CORNER FOR CODE)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;"># OF CONTAINERS</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">PRESERVED (Y/N)</div> <div style="font-size: 2em; margin-left: 10px;">PCB</div> </div>												24 hour RUSH (surcharge applies)		S Soil		GW Ground Water		<input type="checkbox"/> Level 2	
Project Name/ Number: <u>P2316 - Barrels</u>																48 hour RUSH (surcharge applies)		A Air		SW Surface Water		<input type="checkbox"/> Level 3	
QUOTE#																72 hour RUSH (surcharge applies)		C C		WW Waste Water		<input type="checkbox"/> Level 4	
Purchase Order#				Standard (5-7 bus. days)		P Wipe		X Other: Specify		<input type="checkbox"/> EDD													
Lab Sample #				Other: Specify						<input type="checkbox"/> FES Drilling Services													
Date				Time		Client Sample #		Client Sample Descriptor		Remarks:													
10/14/14				1243				P2316 - West - 11-02		S 1 N 1													
10/14/14				1243				P2316 - West - 11-04		S 1 N 1													
10/14/14				1243				P2316 - West - 11-06		S 1 N 1													
10/14/14				1249				P2316 - West - 12-02		S 1 N 1													
10/14/14				1249				P2316 - West - 12-04		S 1 N 1													
10/14/14				1249				P2316 - West - 12-06		S 1 N 1													
10/14/14				1256				P2316 - West - 13-02		S 1 N 1													
10/14/14				1256				P2316 - West - 13-04		S 1 N 1													
10/14/14				1256				P2316 - West - 13-06		S 1 N 1													
10/14/14				1302				P2316 - West - 14-02		S 1 N 1													
Comments:																							
Relinquished By: <u>[Signature]</u>				Date/Time: <u>10/14/14</u>				Received By: <u>[Signature]</u> <u>15:30</u>															
Relinquished By: <u>[Signature]</u>				Date/Time: <u>10/14/14 16:19</u>				Received By: <u>[Signature]</u>															
Relinquished By:				Date/Time:				Received By Laboratory:															
LAB USE ONLY: Fibertec project number: Laboratory Tracking: Temperature at Receipt: <u>56°C</u>																							

TERMS & CONDITIONS ON BACK

COC Revision: February, 2013

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Chain of Custody #  
**136270**  
PAGE 5 of 10

Client Name: <u>Progressive Eng &amp; Const</u>				PARAMETERS												Turnaround		Matrix Code		Deliverables				
Contact Person: <u>Nell Tyler</u>																24 hour RUSH (surcharge applies)		<input checked="" type="checkbox"/> Soil	<input checked="" type="checkbox"/> GW Ground Water	<input type="checkbox"/> Level 2				
Project Name/ Number: <u>P2316 - Dareb</u>																48 hour RUSH (surcharge applies)		<input checked="" type="checkbox"/> Air	<input checked="" type="checkbox"/> SW Surface Water	<input type="checkbox"/> Level 3				
QUOTE#																72 hour RUSH (surcharge applies)		<input checked="" type="checkbox"/> Oil	<input checked="" type="checkbox"/> WW Waste Water	<input type="checkbox"/> Level 4				
Purchase Order#																Standard (5-7 bus. days)		<input checked="" type="checkbox"/> Wipe	<input checked="" type="checkbox"/> Other: Specify	<input type="checkbox"/> EDD				
																Other: Specify		<input type="checkbox"/> FES Drilling Services						
																Remarks:								
Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)																	
	10/14/14	1302		P2316 - West 14-04	S	1	N	1																
	10/14/14	1302		P2316 - West 14-06	S	1	N	1													hold			
	10/14/14	1330		P2316 - East 01-02	S	1	N	1													hold			
	10/14/14	1330		P2316 - East 01-04	S	1	N	1																
	10/14/14	1330		P2316 - East 01-06	S	1	N	1																
	10/14/14	1341		P2316 - East 02-02	S	1	N	1																
	10/14/14	1341		P2316 - East 02-04	S	1	N	1																
	10/14/14	1341		P2316 - East 02-06	S	1	N	1																
	10/14/14	1346		P2316 - East 03-02	S	1	N	1																
	10/14/14	1346		P2316 - East 03-04	S	1	N	1																
Comments:																								
Relinquished By: <u>[Signature]</u>					Date/Time: <u>10/14/14</u>			Received By: <u>[Signature]</u> 15:30																
Relinquished By: <u>[Signature]</u>					Date/Time: <u>10/14/14 16:19</u>			Received By: <u>[Signature]</u>																
Relinquished By:					Date/Time:			Received By Laboratory:																
LAB USE ONLY:																								
Fibertec project number:																								
Laboratory Tracking:																								
Temperature at Receipt: <u>5.6°C</u>																								

TERMS & CONDITIONS ON BACK

COC Revision: February, 2013

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Chain of Custody #  
**136271**  
PAGE 6 of 10

Client Name: <u>Progressive Eng &amp; Const.</u>				PARAMETERS												Turnaround		Matrix Code		Deliverables			
Contact Person: <u>Nell Tynes</u>																24 hour RUSH (surcharge applies)		S Soil GW Ground Water		<input type="checkbox"/> Level 2			
Project Name/ Number: <u>P2316 - Barrels</u>																48 hour RUSH (surcharge applies)		A Air SW Surface Water		<input type="checkbox"/> Level 3			
																72 hour RUSH (surcharge applies)		O Oil WW Waste Water		<input type="checkbox"/> Level 4			
QUOTE#																Standard (5-7 bus. days)		P Wipe X Other: Specify		<input type="checkbox"/> EDD			
Purchase Order#																Other: Specify							
Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)													Remarks:		<input type="checkbox"/> FES Drilling Services	
	10/14/14	1346		P2316 - East - 03-06	S	1	N	1											hold				
	10/14/14	1352		P2316 - East - 04-02	S	1	N	1															
	10/14/14	1352		P2316 - East - 04-04	S	1	N	1															
	10/14/14	1352		P2316 - East - 04-06	S	1	N	1															
	10/14/14	1359		P2316 - East - 05-02	S	1	N	1															
	10/14/14	1359		P2316 - East - 05-04	S	1	N	1															
	10/14/14	1359		P2316 - East - 05-06	S	1	N	1															
	10/14/14	1404		P2316 - East - 06-02	S	1	N	1															
	10/14/14	1404		P2316 - East - 06-04	S	1	N	1															
	10/14/14	1404		P2316 - East - 06-06	S	1	N	1															
Comments:																							
Relinquished By: <u>[Signature]</u>					Date/ Time: <u>10/14/14</u>			Received By: <u>[Signature]</u> 15:30															
Relinquished By: <u>[Signature]</u>					Date/ Time: <u>10/14/14 16:19</u>			Received By: <u>[Signature]</u>															
Relinquished By:					Date/ Time:			Received By Laboratory:															
LAB USE ONLY:																							
Fibertec project number:																							
Laboratory Tracking:																							
Temperature at Receipt: <u>5.6°C</u>																							

TERMS & CONDITIONS ON BACK

COC Revision: February, 2013

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**Analytical Laboratory**  
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**Industrial Hygiene Services, Inc.**  
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**Geoprobe**  
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Phone: 810 220 3300  
Fax: 810 220 3311

Chain of Custody #  
**136272**  
PAGE 7 of 10

Client Name: <b>Progression Eng &amp; Const</b>				PARAMETERS												Turnaround		Matrix Code		Deliverables	
Contact Person: <b>Nell Tyrer</b>				<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">MATRIX (SEE RIGHT CORNER FOR CODE)</div> <div style="margin-left: 10px;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;"># OF CONTAINERS</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">PRESERVED (Y/N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">PCB</div> </div> </div>												24 hour RUSH (surcharge applies)		<input type="checkbox"/> Soil	<input type="checkbox"/> GW Ground Water	<input type="checkbox"/> Level 2	
Project Name/ Number: <b>P2316 - Barrels</b>																48 hour RUSH (surcharge applies)		<input type="checkbox"/> Air	<input type="checkbox"/> SW Surface Water	<input type="checkbox"/> Level 3	
QUOTE#																72 hour RUSH (surcharge applies)		<input type="checkbox"/> Oil	<input type="checkbox"/> WW Waste Water	<input type="checkbox"/> Level 4	
Purchase Order#				Standard (5-7 bus. days)		<input type="checkbox"/> Wipe	<input checked="" type="checkbox"/> Other: Specify														
				Other: Specify		<input type="checkbox"/> FES Drilling Services		<input type="checkbox"/> EDD													
Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor	Remarks:																
	10/14/14	1409		P2316 - East 07-02	hold																
	10/14/14	1409		P2316 - East -07-04																	
	10/14/14	1409		P2316 - East -07-06																	
	10/14/14	1414		P2316 - East -08-02																	
	10/14/14	1414		P2316 - East -08-04																	
	10/14/14	1414		P2316 - East -08-06																	
	10/14/14	1419		P2316 - East -09-02																	
	10/14/14	1419		P2316 - East -09-04																	
	10/14/14	1419		P2316 - East -09-06																	
	10/14/14	1425		P2316 - East -10-02																	
Comments:																					
Relinquished By:					Date/Time: 10/14/14				Received By: <i>[Signature]</i> 15:30												
Relinquished By: <i>[Signature]</i>					Date/Time: 10/14/14 16:19				Received By: <i>[Signature]</i>												
Relinquished By:					Date/Time:				Received By Laboratory:												
LAB USE ONLY: Fibertec project number: Laboratory Tracking: Temperature at Receipt: <b>5.60C</b>																					

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COC Revision: February, 2013

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Fax: 810 220 3311

Chain of Custody #  
**136273**  
PAGE 8 of 10

Client Name: <u>Progressive Eng &amp; Const.</u>				MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)	PCB	PARAMETERS										Turnaround	Matrix Code	Deliverables
Contact Person: <u>Nell Tynes</u>								24 hour RUSH (surcharge applies)	S Soil	GW Ground Water	<input type="checkbox"/> Level 2									
Project Name/ Number: <u>P2316- Barrels</u>								48 hour RUSH (surcharge applies)	A Air	SW Surface Water	<input type="checkbox"/> Level 3									
QUOTE#								72 hour RUSH (surcharge applies)	O Oil	WW Waste Water	<input type="checkbox"/> Level 4									
Purchase Order#															Standard (5-7 bus. days)	W Wipe	X Other: Specify	<input type="checkbox"/> EDD		
Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor											Other: Specify	<input type="checkbox"/> FES Drilling Services				
	10/14/14	1425		P2316 - East - 10-04	S	1	N													
	10/14/14	1425		P2316 - East - 10-06	S	1	N													
	10/14/14	1432		P2316 East - 10-02	S	1	N													
	10/14/14	1432		P2316 East - 11-04	S	1	N													
	10/14/14	1432		P2316 East - 11-06	S	1	N													
	10/14/14	1438		P2316 East - 12-02	S	1	N													
	10/14/14	1438		P2316 East - 12-04	S	1	N													
	10/14/14	1438		P2316 East - 12-06	S	1	N													
	10/14/14	1444		P2316 East - 13-02	S	1	N													
	10/14/14	1444		P2316 East - 1304	S	1	N													
Comments:																				
Relinquished By: <u>[Signature]</u>					Date/ Time: <u>10/14/14</u>		Received By: <u>[Signature]</u> 15:30													
Relinquished By: <u>[Signature]</u>					Date/ Time: <u>10/14/14 16:15</u>		Received By: <u>[Signature]</u>													
Relinquished By:					Date/ Time:		Received By Laboratory:													
LAB USE ONLY: Fibertec project number: Laboratory Tracking: Temperature at Receipt: <u>5.6°C</u>																				

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Brighton, MI 48116  
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Fax: 810 220 3311

Chain of Custody #  
**136274**  
PAGE 9 of 10

Client Name: <u>Progressive Eng &amp; Const.</u>				MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)	<u>PLB</u>	PARAMETERS												Turnaround	Matrix Code	Deliverables
Contact Person: <u>Nell Tynor</u>								24 hour RUSH (surcharge applies)	<input checked="" type="checkbox"/> Soil	<input type="checkbox"/> GW Ground Water	<input type="checkbox"/> Level 2											
Project Name/ Number: <u>P2316 - Borels</u>								48 hour RUSH (surcharge applies)	<input type="checkbox"/> Air	<input type="checkbox"/> SW Surface Water	<input type="checkbox"/> Level 3											
QUOTE#								72 hour RUSH (surcharge applies)	<input type="checkbox"/> Oil	<input type="checkbox"/> WW Waste Water	<input type="checkbox"/> Level 4											
Purchase Order#								<input checked="" type="checkbox"/> Standard (5-7 bus. days)												<input type="checkbox"/> Other: Specify	<input checked="" type="checkbox"/> Other: Specify	<input type="checkbox"/> EDD
Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor													Remarks:	<input type="checkbox"/> FES Drilling Services				
	10/14/14	1444		P2316 East - 1306	S	I	N	I										hold				
	10/14/14	1452		P2316 East - 1402	S	I	N	I														
	10/14/14	1452		P2316 East - 1404	S	I	N	I														
	10/14/14	1452		P2316 East - 1406	S	I	N	I														
	10/14/14	1100		P2316 - West MS MSD1	S	I	N	I														
	10/14/14	1115		P2316 West MS MSD2	S	I	N	I														
	10/14/14	1055		P2316 West Dup 01	S	I	N	I														
	10/14/14	1120		P2316 West Dup 02	S	I	N	I														
	10/14/14	1238		P2316 West Dup 03	S	I	N	I														
	10/14/14	1256		P2316 West Dup 04	S	I	N	I										hold				
Comments:																						
Relinquished By: <u>[Signature]</u>					Date/ Time: <u>10/14/14</u>					Received By: <u>[Signature]</u>					Date/ Time: <u>15:30</u>							
Relinquished By: <u>[Signature]</u>					Date/ Time: <u>10/14/14 16:19</u>					Received By: <u>[Signature]</u>					Date/ Time: <u></u>							
Relinquished By: <u></u>					Date/ Time: <u></u>					Received By Laboratory: <u></u>					Date/ Time: <u></u>							
LAB USE ONLY:																						
Fibertec project number:																						
Laboratory Tracking:																						
Temperature at Receipt: <u>5.6°C</u>																						

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Chain of Custody #  
**136275**  
PAGE 10 of 10

Client Name: <b>Progressive Eng &amp; Const</b>				MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)	<b>8 PCBs</b>	PARAMETERS												Turnaround	Matrix Code		Deliverables	
Contact Person: <b>Nell Turner</b>								24 hour RUSH (surcharge applies)	<input type="checkbox"/> Soil	<input type="checkbox"/> GW Ground Water	<input type="checkbox"/> Level 2													
Project Name/ Number: <b>P2316 - Barrels</b>								48 hour RUSH (surcharge applies)	<input type="checkbox"/> Air	<input type="checkbox"/> SW Surface Water	<input type="checkbox"/> Level 3													
QUOTE#								72 hour RUSH (surcharge applies)	<input type="checkbox"/> Oil	<input type="checkbox"/> WW Waste Water	<input type="checkbox"/> Level 4													
Purchase Order#								<input checked="" type="checkbox"/> Standard (5-7 bus. days)												<input type="checkbox"/> Other: Specify	<input type="checkbox"/> Other: Specify		<input type="checkbox"/> EDD	
Lap Sample #	Date	Time	Client Sample #	Client Sample Descriptor														Remarks:						
	10/14/14	1359		P2316 East MSM01	S	1	N	1										hnd						
	10/14/14	1409		P2316 East MSM02	S	1	N	1																
	10/14/14	1346		P2316 East Dup 01	S	1	N	1																
	10/14/14	1419		P2316 East Dup 02	S	1	N	1																
	10/14/14	1432		P2316 East Dup 03	S	1	N	1																
	10/14/14	1444		P2316 East Dup 04	S	1	N	1																
Comments:																								
Relinquished By: <i>[Signature]</i>					Date/ Time: <b>10/14</b>			Received By: <i>[Signature]</i> <b>15:20</b>																
Relinquished By: <i>[Signature]</i>					Date/ Time: <b>10/14/14 16:14</b>			Received By: <i>[Signature]</i> <b>16:14</b>																
Relinquished By:					Date/ Time:			Received By Laboratory:																
LAB USE ONLY:																								
Fibertec project number:																								
Laboratory Tracking:																								
Temperature at Receipt: <b>5.6°C</b>																								

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COC Revision: February, 2013

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Wednesday, October 29, 2014

Fibertec Project Number: 64820  
Project Identification: Barrels (P2316) /P2316  
Submittal Date: 10/15/2014

Dr. G. Nell Tyner  
Progressive Engineering & Construction, Inc.  
3912 W. Humphrey Street  
Tampa, FL 33614

Dear Dr. Tyner,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 14 days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read 'Daryl Strandbergh'.

Daryl P. Strandbergh  
Laboratory Director

DPS/cdh

Enclosures

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F: (517) 699-0388  
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F: (231) 775-8584

Client Identification:	<b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description:	<b>Preburn</b>	Chain of Custody:	<b>136281</b>
Client Project Name:	<b>Barrels (P2316)</b>	Sample No:	<b>1</b>	Collect Date:	<b>10/15/14</b>
Client Project No:	<b>P2316</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>10:37</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64820-001**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	15		%	0.1	1.0	10/27/14	MC141027	10/28/14	MC141027	KRF

**RCRA Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)**

**Aliquot ID: 64820-001**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Arsenic	3000		µg/kg	100	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
2. Barium	54000		µg/kg	1000	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
3. Cadmium	56		µg/kg	50	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
4. Chromium	9200		µg/kg	500	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
5. Lead	5600		µg/kg	1000	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
6. Selenium	U		µg/kg	200	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH
7. Silver	U		µg/kg	100	20	10/27/14	PT14J27I	10/28/14	T414J28A	JLH

**Mercury by CVAAS (EPA 7471B)**

**Aliquot ID: 64820-001**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Mercury	U		µg/kg	50	9.0	10/28/14	PM14J28A	10/29/14	M614J28A	JLH

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64820-001**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA

**Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035A/EPA 8260B)**

**Aliquot ID: 64820-001A**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Acetone	U		µg/kg	1000	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD

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Analytical Laboratory Report  
Laboratory Project Number: 64820  
Laboratory Sample Number: 64820-001

Order: 64820  
Page: 3 of 14  
Date: 10/29/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **Preburn** Chain of Custody: **136281**  
Client Project Name: **Barrels (P2316)** Sample No: **1** Collect Date: **10/15/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **10:37**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035A/EPA 8260B)

Aliquot ID: 64820-001A

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 2. Acrylonitrile	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
3. Benzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
4. Bromobenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
5. Bromochloromethane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
6. Bromodichloromethane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
7. Bromoform	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
8. Bromomethane	U		µg/kg	200	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
9. 2-Butanone	U		µg/kg	750	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
10. n-Butylbenzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
11. sec-Butylbenzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
12. tert-Butylbenzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
13. Carbon Disulfide	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
14. Carbon Tetrachloride	U		µg/kg	59	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
15. Chlorobenzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
16. Chloroethane	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
17. Chloroform	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
18. Chloromethane	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
19. 2-Chlorotoluene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
20. Dibromochloromethane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
‡ 21. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	59	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
22. Dibromomethane	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
28. 1,2-Dichloroethane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
32. 1,2-Dichloropropane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
33. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
35. Ethylbenzene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
36. Ethylene Dibromide	U		µg/kg	59	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
37. 2-Hexanone	U		µg/kg	2500	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
38. Isopropylbenzene	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
39. Methylene Chloride	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD

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**Analytical Laboratory Report**  
**Laboratory Project Number: 64820**  
**Laboratory Sample Number: 64820-001**

Order: 64820  
Page: 4 of 14  
Date: 10/29/14

Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>Preburn</b>	Chain of Custody: <b>136281</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>1</b>	Collect Date: <b>10/15/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:37</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035A/EPA 8260B)**

**Aliquot ID: 64820-001A**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 40. 2-Methylnaphthalene	U		µg/kg	330	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
41. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
42. MTBE	U		µg/kg	250	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
43. Naphthalene	U		µg/kg	330	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
44. n-Propylbenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
45. Styrene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
48. Tetrachloroethene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
49. Toluene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
50. 1,2,4-Trichlorobenzene	U		µg/kg	330	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
53. Trichloroethene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
54. Trichlorofluoromethane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
59. Vinyl Chloride	U		µg/kg	40	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
60. m&p-Xylene	U		µg/kg	100	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
61. o-Xylene	U		µg/kg	50	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD
62. Xylenes	U		µg/kg	150	1.0	10/24/14	VJ14J24B	10/25/14	VJ14J24B	CCD

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Analytical Laboratory Report  
Laboratory Project Number: 64820  
Laboratory Sample Number: 64820-002

Order: 64820  
Page: 5 of 14  
Date: 10/29/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **Preburn** Chain of Custody: **136281**  
Client Project Name: **Barrels (P2316)** Sample No: **2** Collect Date: **10/15/14**  
Client Project No: **P2316** Sample Matrix: **Wastewater** Collect Time: **11:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Trace Elements by ICP/MS, Total Recoverable (EPA 0200.8-M/EPA 0200.8)

Aliquot ID: 64820-002A

Matrix: Wastewater

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Antimony	U		mg/L	0.0020	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
2. Arsenic	U		mg/L	0.0050	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
3. Barium	0.12		mg/L	0.10	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
4. Cadmium	U		mg/L	0.0010	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
5. Chromium	0.054		mg/L	0.010	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
6. Lead	0.074		mg/L	0.0030	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
7. Selenium	U		mg/L	0.0050	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH
8. Silver	U		mg/L	0.00020	10	10/27/14	PT14J27J	10/28/14	T414J28A	JLH

Mercury by CVAAS, Total (EPA 0245.1)

Aliquot ID: 64820-002A

Matrix: Wastewater

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Mercury	U		mg/L	0.00020	1.0	10/29/14	PM14J29A	10/29/14	M614J29B	JLH

Volatile Organic Compounds by GC/MS (EPA 0624)

Aliquot ID: 64820-002

Matrix: Wastewater

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Acetone	U		mg/L	0.050	1.0	10/27/14	VB14J27A	10/27/14	VB14J27A	JPL
2. Acrylonitrile	U		mg/L	0.0020	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
3. Benzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 4. Bromobenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 5. Bromochloromethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
6. Bromodichloromethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
7. Bromoform	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
8. Bromomethane	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 9. 2-Butanone	U		mg/L	0.025	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 10. n-Butylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 11. sec-Butylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 12. tert-Butylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 13. Carbon Disulfide	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
14. Carbon Tetrachloride	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
15. Chlorobenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
16. Chloroethane	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
17. Chloroform	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
18. Chloromethane	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 19. 2-Chlorotoluene	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL

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Analytical Laboratory Report  
Laboratory Project Number: 64820  
Laboratory Sample Number: 64820-002

Order: 64820  
Page: 6 of 14  
Date: 10/29/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **Preburn** Chain of Custody: **136281**  
Client Project Name: **Barrels (P2316)** Sample No: **2** Collect Date: **10/15/14**  
Client Project No: **P2316** Sample Matrix: **Wastewater** Collect Time: **11:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds by GC/MS (EPA 0624)

Aliquot ID: 64820-002

Matrix: Wastewater

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
20. Dibromochloromethane	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 21. 1,2-Dibromo-3-chloropropane (SIM)	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 22. Dibromomethane	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
23. 1,2-Dichlorobenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
24. 1,3-Dichlorobenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
25. 1,4-Dichlorobenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 26. Dichlorodifluoromethane	U		mg/L	0.0050	1.0	10/27/14	VB14J27A	10/27/14	VB14J27A	JPL
27. 1,1-Dichloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
28. 1,2-Dichloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
29. 1,1-Dichloroethene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 30. cis-1,2-Dichloroethene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
31. trans-1,2-Dichloroethene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
32. 1,2-Dichloropropane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
33. cis-1,3-Dichloropropene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
34. trans-1,3-Dichloropropene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
35. Ethylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 36. Ethylene Dibromide	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 37. 2-Hexanone	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 38. Isopropylbenzene	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
39. Methylene Chloride	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 40. 2-Methylnaphthalene	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 41. 4-Methyl-2-pentanone	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 42. MTBE	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 43. Naphthalene	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 44. n-Propylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
45. 1,1,1-Trichloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
46. 1,1,1,2-Tetrachloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
47. 1,1,2,2-Tetrachloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
48. Tetrachloroethene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
49. Toluene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 50. 1,2,4-Trichlorobenzene	U		mg/L	0.0050	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
51. 1,1,1-Trichloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
52. 1,1,2-Trichloroethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
53. Trichloroethene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
54. Trichlorofluoromethane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 55. 1,2,3-Trichloropropane	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 56. 1,2,3-Trimethylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 57. 1,2,4-Trimethylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL

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Analytical Laboratory Report  
Laboratory Project Number: 64820  
Laboratory Sample Number: 64820-002

Order: 64820  
Page: 7 of 14  
Date: 10/29/14

Client Identification:	Progressive Engineering & Construction, Inc.	Sample Description:	Preburn	Chain of Custody:	136281
Client Project Name:	Barrels (P2316)	Sample No:	2	Collect Date:	10/15/14
Client Project No:	P2316	Sample Matrix:	Wastewater	Collect Time:	11:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds by GC/MS (EPA 0624)

Aliquot ID: 64820-002

Matrix: Wastewater

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 58. 1,3,5-Trimethylbenzene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
59. Vinyl Chloride	U		mg/L	0.0010	1.0	10/27/14	VB14J27A	10/27/14	VB14J27A	JPL
‡ 60. m&p-Xylene	U		mg/L	0.0020	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 61. o-Xylene	U		mg/L	0.0010	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL
‡ 62. Xylenes	U		mg/L	0.0030	1.0	10/24/14	VB14J24B	10/25/14	VB14J24B	JPL

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Analytical Laboratory Report  
Laboratory Project Number: 64820  
Laboratory Sample Number: 64820-012

Order: 64820  
Page: 8 of 14  
Date: 10/29/14

Client Identification: **Progressive Engineering & Construction, Inc.** Sample Description: **P2316-Mid-04-02** Chain of Custody: **136276**  
Client Project Name: **Barrels (P2316)** Sample No: **12** Collect Date: **10/15/14**  
Client Project No: **P2316** Sample Matrix: **Soil/Solid** Collect Time: **10:15**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64820-012**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	16		%	0.1	1.0	10/27/14	MC141027	10/28/14	MC141027	KRF

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64820-012**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA

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F: (231) 775-8584



Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-Mid-04-04</b>	Chain of Custody: <b>136276</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>13</b>	Collect Date: <b>10/15/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:15</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64820-013**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	19		%	0.1	1.0	10/27/14	MC141027	10/28/14	MC141027	KRF

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64820-013**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA

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F: (231) 775-8584

Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-Mid-05-02</b>	Chain of Custody: <b>136277</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>15</b>	Collect Date: <b>10/15/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:10</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64820-015**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	<b>16</b>		<b>%</b>	<b>0.1</b>	<b>1.0</b>	<b>10/27/14</b>	<b>MC141027</b>	<b>10/28/14</b>	<b>MC141027</b>	<b>KRF</b>

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64820-015**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
2. Aroclor-1221	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
3. Aroclor-1232	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
4. Aroclor-1242	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
5. Aroclor-1248	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
6. Aroclor-1254	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
7. Aroclor-1260	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
‡ 8. Aroclor-1262	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
‡ 9. Aroclor-1268	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>

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Analytical Laboratory Report  
Laboratory Project Number: 64820  
Laboratory Sample Number: 64820-016

Order: 64820  
Page: 11 of 14  
Date: 10/29/14

Client Identification:	Progressive Engineering & Construction, Inc.	Sample Description:	P2316-Mid-05-04	Chain of Custody:	136277
Client Project Name:	Barrels (P2316)	Sample No:	16	Collect Date:	10/15/14
Client Project No:	P2316	Sample Matrix:	Soil/Solid	Collect Time:	10:10
Sample Comments: Soil results have been calculated and reported on a dry weight basis unless otherwise noted.					
Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.					

Dry Weight Determination (ASTM D 2974-87)

Aliquot ID: 64820-016

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	19		%	0.1	1.0	10/27/14	MC141027	10/28/14	MC141027	KRF

Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)

Aliquot ID: 64820-016

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
2. Aroclor-1221	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
3. Aroclor-1232	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
4. Aroclor-1242	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
5. Aroclor-1248	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
6. Aroclor-1254	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
7. Aroclor-1260	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	10/27/14	PS14J27F	10/27/14	SB14J27A	BDA

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Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-Mid-06-02</b>	Chain of Custody: <b>136277</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>18</b>	Collect Date: <b>10/15/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:02</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: **Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not Included in NELAC Scope of Analysis.**

**Dry Weight Determination (ASTM D 2974-87)**

Aliquot ID: **64820-018**

Matrix: **Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	<b>15</b>		<b>%</b>	<b>0.1</b>	<b>1.0</b>	<b>10/27/14</b>	<b>MC141027</b>	<b>10/28/14</b>	<b>MC141027</b>	<b>KRF</b>

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

Aliquot ID: **64820-018**

Matrix: **Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
2. Aroclor-1221	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
3. Aroclor-1232	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
4. Aroclor-1242	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
5. Aroclor-1248	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
6. Aroclor-1254	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
7. Aroclor-1260	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
‡ 8. Aroclor-1262	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>
‡ 9. Aroclor-1268	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	<b>10/27/14</b>	<b>PS14J27F</b>	<b>10/27/14</b>	<b>SB14J27A</b>	<b>BDA</b>

Client Identification: <b>Progressive Engineering &amp; Construction, Inc.</b>	Sample Description: <b>P2316-Mid-06-04</b>	Chain of Custody: <b>136277</b>
Client Project Name: <b>Barrels (P2316)</b>	Sample No: <b>19</b>	Collect Date: <b>10/15/14</b>
Client Project No: <b>P2316</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:02</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Dry Weight Determination (ASTM D 2974-87)**

**Aliquot ID: 64820-019**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
‡ 1. Percent Moisture (Water Content)	<b>19</b>		<b>%</b>	<b>0.1</b>	<b>1.0</b>	10/27/14	MC141027	10/28/14	MC141027	KRF

**Polychlorinated Biphenyls (PCBs) (EPA 3546/EPA 8082A)**

**Aliquot ID: 64820-019**

**Matrix: Soil/Solid**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/27/14	PS14J27F	10/28/14	SB14J28A	BDA
2. Aroclor-1221	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/27/14	PS14J27F	10/28/14	SB14J28A	BDA
3. Aroclor-1232	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/27/14	PS14J27F	10/28/14	SB14J28A	BDA
4. Aroclor-1242	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/27/14	PS14J27F	10/28/14	SB14J28A	BDA
5. Aroclor-1248	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/27/14	PS14J27F	10/28/14	SB14J28A	BDA
6. Aroclor-1254	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/27/14	PS14J27F	10/28/14	SB14J28A	BDA
7. Aroclor-1260	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/27/14	PS14J27F	10/28/14	SB14J28A	BDA
‡ 8. Aroclor-1262	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/27/14	PS14J27F	10/28/14	SB14J28A	BDA
‡ 9. Aroclor-1268	<b>U</b>		<b>µg/kg</b>	<b>100</b>	<b>5.0</b>	10/27/14	PS14J27F	10/28/14	SB14J28A	BDA



Definitions/Qualifiers:

- A:** Spike recovery or precision unusable due to dilution.  
**B:** The analyte was detected in the associated method blank.  
**E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.  
**J:** The concentration is an estimated value.  
**M:** Modified Method  
**U:** The analyte was not detected at or above the reporting limit.  
**X:** Matrix Interference has resulted in a raised reporting limit or distorted result.  
**W:** Results reported on a wet-weight basis.  
**\*:** Value reported is outside QA limits

Exception Summary:



Accreditation Number(s):

**E-10395 (KS)**

**T104704518-13-1 (TX)**

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**Quality Control Report**  
**Preparation Batch QC Summary**  
**Gas Chromatography - Electron Capture Detector**  
**Soil/Solid**

Batch ID: PS14J27F  
Page: 1 of 1  
Date: 12/03/14

Preparation Batch: PS14J27F      Preparation Date: 10/27/14

Parameter	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result µg/kg	RL µg/kg	Q	Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Aroclor-1016	U	100		969	1,333	73	60 - 122						MB-6	LCS-6	
2. Aroclor-1260	U	100		1,171	1,333	88	70 - 131						MB-6	LCS-6	

System Monitoring Compounds (Surrogates):	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code			
	Result µg/kg	Spike µg/kg	Rec. %	Q	Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Decachlorobiphenyl-PCB(S)	51.9	66.7	78		59.4	66.7	89	40 - 143						MB-6	LCS-6	
2. 2,4,5,6-Tetrachloro-m-xylene-PCB(S)	48.7	66.7	73		47.7	66.7	72	42 - 133						MB-6	LCS-6	

**Definitions/Qualifiers:**

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

**Run Code (Analysis Sequence/Run Time):**

MB-6    SA14J28A    10/28/14 11:18  
LCS-6    SA14J28A    10/28/14 13:53

**Exception Summary:**

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

**Report Generated By:**



**Anthony Donnelly**  
Information Technology Officer  
Wednesday, December 03, 2014  
4:28:41 PM

**Quality Control Report**  
**Preparation Batch QC Summary**  
**Inductively Coupled Plasma - Mass Spectrometry**  
**Soil/Solid**

Batch ID: PT14J27I  
Page: 1 of 1  
Date: 12/03/14

Preparation Batch: PT14J27I

Preparation Date: 10/27/14

Parameter	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result µg/kg	RL µg/kg	Q	Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Arsenic	U	100		9,906	10,000	99	85 - 115						MB-5	LCS-5	
2. Barium	U	1000		49,774	50,000	100	85 - 115						MB-5	LCS-5	
3. Cadmium	U	50		9,731	10,000	97	85 - 115						MB-5	LCS-5	
4. Chromium	U	500		20,209	20,000	101	85 - 115						MB-5	LCS-5	
5. Lead	U	1000		20,466	20,000	102	85 - 115						MB-5	LCS-5	
6. Selenium	U	200		9,649	10,000	96	85 - 115						MB-5	LCS-5	
7. Silver	U	100		10,661	10,000	107	85 - 115						MB-5	LCS-5	

**Definitions/Qualifiers:**

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

**Run Code (Analysis Sequence/Run Time):**

MB-5 T414J28A 10/28/14 10:16  
LCS-5 T414J28A 10/28/14 10:18

**Exception Summary:**

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

**Report Generated By:**



**Anthony Donnelly**  
Information Technology Officer  
Wednesday, December 03, 2014  
4:28:41 PM



Quality Control Report  
Preparation Batch QC Summary  
Inductively Coupled Plasma - Mass Spectrometry  
Soil/Solid

Batch ID: PT14K11E  
Page: 1 of 1  
Date: 12/03/14

Preparation Batch: PT14K11E

Preparation Date: 11/11/14

Parameter	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)			Run Code			
	Result	RL	Q	Result	Spike	Rec.	LCL - UCL	Q	Rec.	RPD	UCL	Q	MB	LCS	LCD
	µg/kg	µg/kg		µg/kg	µg/kg	%	%		%	%	%				
1. Antimony	U	300		4,894	5,000	98	-						MB-9	LCS-9	

Definitions/Qualifiers:

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-9 T414K12A 11/12/14 08:44  
LCS-9 T414K12A 11/12/14 08:45

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Anthony Donnelly  
Information Technology Officer  
Wednesday, December 03, 2014  
4:28:41 PM

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**Quality Control Report**  
**Preparation Batch QC Summary**  
**Inductively Coupled Plasma - Mass Spectrometry**  
**Aqueous**

Batch ID: PT14J27J  
Page: 1 of 1  
Date: 12/03/14

Preparation Batch: PT14J27J

Preparation Date: 10/27/14

Parameter	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result µg/L	RL µg/L	Q	Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Antimony	U	2.0		91.3	100	91	85 - 115						MB-4	LCS-4	
2. Arsenic	U	5.0		93.0	100	93	85 - 115						MB-4	LCS-4	
3. Barium	U	100		483	500	93	85 - 115						MB-4	LCS-4	
4. Cadmium	U	1.0		90.7	100	91	85 - 115						MB-4	LCS-4	
5. Chromium	U	10		189	200	95	85 - 115						MB-4	LCS-4	
6. Lead	U	3.0		191	200	95	85 - 115						MB-4	LCS-4	
7. Selenium	U	5.0		92.3	100	92	85 - 115						MB-4	LCS-4	
8. Silver	U	0.20		98.8	100	99	85 - 115						MB-4	LCS-4	

**Definitions/Qualifiers:**

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

**Run Code (Analysis Sequence/Run Time):**

MB-4 T414J28A 10/28/14 09:30  
LCS-4 T414J28A 10/28/14 09:32

**Exception Summary:**

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

**Report Generated By:**



**Anthony Donnelly**  
Information Technology Officer  
Wednesday, December 03, 2014  
4:28:41 PM

Quality Control Report  
Preparation Batch QC Summary  
Cold Vapor Atomic Absorption Spectrometry  
Soil/Solid

Batch ID: PM14J28A  
Page: 1 of 1  
Date: 12/03/14

Preparation Batch: PM14J28A Preparation Date: 10/28/14

Parameter	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result	RL	Q	Result	Spike	Rec.	LCL - UCL	Q	Rec.	RPD	UCL	Q	MB	LCS	LCD
1. Mercury	U	50		192	200	96	85 - 115						MB-7	LCS-7	

Definitions/ Qualifiers:

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-7 M614J29A 10/29/14 11:34  
LCS-7 M614J29A 10/29/14 11:36

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:



**Anthony Donnelly**  
Information Technology Officer  
Wednesday, December 03, 2014  
4:28:40 PM



Quality Control Report  
Preparation Batch QC Summary  
Cold Vapor Atomic Absorption Spectrometry  
Aqueous

Batch ID: PM14J29A  
Page: 1 of 1  
Date: 12/03/14

Preparation Batch: PM14J29A      Preparation Date: 10/29/14

Parameter	Method Blank (MB)			Laboratory Control Sample (LCS)				LCS Duplicate (LCD)				Run Code		
	Result	RL	Q	Result	Spike	Rec.	LCL - UCL	Rec.	RPD	UCL	Q	MB	LCS	LCD
	µg/L	µg/L		µg/L	µg/L	%	%	%	%	%				
1. Mercury	U	0.20		0.252	0.250	101	85 - 115					MB-8	LCS-8	

Definitions/Qualifiers:

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-8    M614K03A    10/29/14 13:54  
LCS-8    M614K03A    10/29/14 13:56

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

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Wednesday, December 03, 2014  
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Quality Control Report  
Preparation Batch QC Summary  
Gas Chromatography - Mass Spectrometry (Volatiles)  
Soil/Solid

Batch ID: VJ14J24B  
Page: 1 of 2  
Date: 12/03/14

Preparation Batch: VJ14J24B

Preparation Date: 10/24/14

Parameter	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result µg/kg	RL µg/kg	Q	Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Acetone	U	1000		5,131	5,000	103	50 - 145		95	8	20		MB-1	LCS-1	LCD-1
2. Acrylonitrile	U	100		4,871	5,000	97	66 - 139		102	5	20		MB-1	LCS-1	LCD-1
3. Benzene	U	50		5,360	5,000	107	70 - 130		103	4	20		MB-1	LCS-1	LCD-1
4. Bromobenzene	U	100		4,683	5,000	94	70 - 130		93	1	20		MB-1	LCS-1	LCD-1
5. Bromochloromethane	U	100		4,642	5,000	93	62 - 134		92	1	20		MB-1	LCS-1	LCD-1
6. Bromodichloromethane	U	100		5,383	5,000	108	70 - 130		107	1	20		MB-1	LCS-1	LCD-1
7. Bromoform	U	100		6,006	5,000	120	70 - 130		121	1	20		MB-1	LCS-1	LCD-1
8. Bromomethane	U	200		4,905	5,000	98	56 - 135		98	0	20		MB-1	LCS-1	LCD-1
9. 2-Butanone	U	750		5,360	5,000	107	56 - 141		92	15	20		MB-1	LCS-1	LCD-1
10. n-Butylbenzene	U	50		5,201	5,000	104	70 - 141		102	2	20		MB-1	LCS-1	LCD-1
11. sec-Butylbenzene	U	50		5,250	5,000	105	70 - 130		101	4	20		MB-1	LCS-1	LCD-1
12. tert-Butylbenzene	U	50		5,232	5,000	105	70 - 130		102	3	20		MB-1	LCS-1	LCD-1
13. Carbon Disulfide	U	250		4,790	5,000	96	70 - 132		94	2	20		MB-1	LCS-1	LCD-1
14. Carbon Tetrachloride	U	50		5,667	5,000	113	70 - 143		110	3	20		MB-1	LCS-1	LCD-1
15. Chlorobenzene	U	50		5,075	5,000	102	70 - 130		101	1	20		MB-1	LCS-1	LCD-1
16. Chloroethane	U	250		4,264	5,000	85	60 - 150		83	2	20		MB-1	LCS-1	LCD-1
17. Chloroform	U	50		4,923	5,000	98	71 - 125		97	1	20		MB-1	LCS-1	LCD-1
18. Chloromethane	U	250		4,665	5,000	93	63 - 137		94	1	20		MB-1	LCS-1	LCD-1
19. 2-Chlorotoluene	U	50		4,878	5,000	98	70 - 130		94	4	20		MB-1	LCS-1	LCD-1
20. Dibromochloromethane	U	100		5,290	5,000	106	70 - 130		107	1	20		MB-1	LCS-1	LCD-1
21. 1,2-Dibromo-3-chloropropane	U	50		5,178	5,000	104	70 - 134		105	1	20		MB-1	LCS-1	LCD-1
22. Dibromomethane	U	250		5,633	5,000	113	70 - 130		113	0	20		MB-1	LCS-1	LCD-1
23. 1,2-Dichlorobenzene	U	100		5,185	5,000	104	70 - 130		101	3	20		MB-1	LCS-1	LCD-1
24. 1,3-Dichlorobenzene	U	100		5,190	5,000	104	70 - 130		101	3	20		MB-1	LCS-1	LCD-1
25. 1,4-Dichlorobenzene	U	100		5,235	5,000	105	70 - 130		101	4	20		MB-1	LCS-1	LCD-1
26. Dichlorodifluoromethane	U	250		5,474	5,000	109	70 - 144		108	1	20		MB-1	LCS-1	LCD-1
27. 1,1-Dichloroethane	U	50		5,011	5,000	100	70 - 130		98	2	20		MB-1	LCS-1	LCD-1
28. 1,2-Dichloroethane	U	50		5,226	5,000	105	69 - 130		103	2	20		MB-1	LCS-1	LCD-1
29. 1,1-Dichloroethene	U	50		5,398	5,000	108	72 - 131		105	3	20		MB-1	LCS-1	LCD-1
30. cis-1,2-Dichloroethene	U	50		4,848	5,000	97	70 - 131		95	2	20		MB-1	LCS-1	LCD-1
31. trans-1,2-Dichloroethene	U	50		4,926	5,000	99	70 - 131		98	3	20		MB-1	LCS-1	LCD-1
32. 1,2-Dichloropropane	U	50		5,288	5,000	106	80 - 127		103	3	20		MB-1	LCS-1	LCD-1
33. cis-1,3-Dichloropropene	U	50		5,242	5,000	105	70 - 131		103	2	20		MB-1	LCS-1	LCD-1
34. trans-1,3-Dichloropropene	U	50		5,125	5,000	102	70 - 132		101	1	20		MB-1	LCS-1	LCD-1
35. Ethylbenzene	U	50		5,209	5,000	104	80 - 120		103	1	20		MB-1	LCS-1	LCD-1
36. Ethylene Dibromide	U	50		5,256	5,000	105	70 - 130		106	1	20		MB-1	LCS-1	LCD-1
37. 2-Hexanone	U	2500		5,537	5,000	111	68 - 138		99	11	20		MB-1	LCS-1	LCD-1
38. Isopropylbenzene	U	250		5,408	5,000	108	70 - 130		108	0	20		MB-1	LCS-1	LCD-1
39. Methylene Chloride	U	100		4,877	5,000	98	62 - 130		95	3	20		MB-1	LCS-1	LCD-1
40. 2-Methylnaphthalene	U	330		5,056	5,000	101	51 - 149		100	1	20		MB-1	LCS-1	LCD-1
41. 4-Methyl-2-pentanone	U	2500		5,532	5,000	111	70 - 133		110	1	20		MB-1	LCS-1	LCD-1
42. MTBE	U	250		5,006	5,000	100	61 - 142		101	1	20		MB-1	LCS-1	LCD-1
43. Naphthalene	U	330		5,088	5,000	102	70 - 138		100	2	20		MB-1	LCS-1	LCD-1
44. n-Propylbenzene	U	100		5,023	5,000	100	70 - 130		96	4	20		MB-1	LCS-1	LCD-1
45. Styrene	U	50		5,373	5,000	107	70 - 130		106	1	20		MB-1	LCS-1	LCD-1
46. 1,1,1,2-Tetrachloroethane	U	100		5,574	5,000	111	70 - 130		110	1	20		MB-1	LCS-1	LCD-1
47. 1,1,1,2,2-Tetrachloroethane	U	50		4,664	5,000	93	70 - 130		94	1	20		MB-1	LCS-1	LCD-1
48. Tetrachloroethene	U	50		5,738	5,000	115	70 - 130		112	3	20		MB-1	LCS-1	LCD-1
49. Toluene	U	50		5,294	5,000	106	79 - 120		102	4	20		MB-1	LCS-1	LCD-1
50. 1,2,4-Trichlorobenzene	U	330		5,148	5,000	103	70 - 133		101	2	20		MB-1	LCS-1	LCD-1
51. 1,1,1-Trichloroethane	U	50		5,251	5,000	105	70 - 130		102	3	20		MB-1	LCS-1	LCD-1

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**Quality Control Report**  
**Preparation Batch QC Summary**  
**Gas Chromatography - Mass Spectrometry (Volatiles)**  
**Soli/Solid**

Batch ID: VJ14J24B  
Page: 2 of 2  
Date: 12/03/14

Preparation Batch: VJ14J24B

Preparation Date: 10/24/14

Parameter	Method Blank (MB)			Laboratory Control Sample (LCS)						LCS Duplicate (LCD)				Run Code		
	Result	RL	Q	Result	Spike	Rec.	LCL - UCL	Q	Rec.	RPD	UCL	Q	MB	LCS	LCD	
	µg/kg	µg/kg		µg/kg	µg/kg	%	%		%	%	%					%
52. 1,1,2-Trichloroethane	U	50		5,177	5,000	104	70 - 130		107	3	20		MB-1	LCS-1	LCD-1	
53. Trichloroethene	U	50		5,588	5,000	112	70 - 130		109	3	20		MB-1	LCS-1	LCD-1	
54. Trichlorofluoromethane	U	100		5,299	5,000	106	50 - 150		101	5	20		MB-1	LCS-1	LCD-1	
55. 1,2,3-Trichloropropane	U	100		5,088	5,000	102	70 - 130		105	3	20		MB-1	LCS-1	LCD-1	
56. 1,2,3-Trimethylbenzene	U	100		5,199	5,000	104	70 - 130		101	3	20		MB-1	LCS-1	LCD-1	
57. 1,2,4-Trimethylbenzene	U	100		5,179	5,000	104	70 - 130		101	3	20		MB-1	LCS-1	LCD-1	
58. 1,3,5-Trimethylbenzene	U	100		5,142	5,000	103	70 - 130		99	4	20		MB-1	LCS-1	LCD-1	
59. Vinyl Chloride	U	40		5,007	5,000	100	70 - 130		98	2	20		MB-1	LCS-1	LCD-1	
60. m&p-Xylene	U	100		10,631	10,000	106	70 - 130		104	2	20		MB-1	LCS-1	LCD-1	
61. o-Xylene	U	50		5,291	5,000	106	70 - 130		105	1	20		MB-1	LCS-1	LCD-1	

System Monitoring Compounds (Surrogates):	Method Blank (MB)				Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result	Spike	Rec.		Result	Spike	Rec.	LCL - UCL		Rec.	RPD	UCL		MB	LCS	LCD
	µg/kg	µg/kg	%	Q	µg/kg	µg/kg	%	%	Q	%	%	%	Q			
1. Dibromofluoromethane(S)	2,404	2,500	96		2,337	2,500	93	77 - 120		93	0	20		MB-1	LCS-1	LCD-1
2. 1,2-Dichloroethane-d4(S)	2,529	2,500	101		2,512	2,500	100	65 - 131		99	1	20		MB-1	LCS-1	LCD-1
3. Toluene-d8(S)	2,476	2,500	99		2,490	2,500	100	75 - 121		98	2	20		MB-1	LCS-1	LCD-1
4. 4-Bromofluorobenzene(S)	2,413	2,500	97		2,464	2,500	99	80 - 120		102	3	20		MB-1	LCS-1	LCD-1

**Definitions/Qualifiers:**

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

**Run Code (Analysis Sequence/Run Time):**

MB-1 VJ14J24B 10/24/14 23:00  
LCS-1 VJ14J24B 10/24/14 21:00  
LCD-1 VJ14J24B 10/24/14 21:24

**Exception Summary:**

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

**Report Generated By:**



**Anthony Donnelly**  
Information Technology Officer  
Wednesday, December 03, 2014  
4:28:44 PM

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Quality Control Report  
Preparation Batch QC Summary  
Gas Chromatography - Mass Spectrometry (Volatiles)  
Aqueous

Batch ID: VB14J24B  
Page: 1 of 2  
Date: 12/03/14

Preparation Batch: VB14J24B

Preparation Date: 10/24/14

Parameter	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result µg/L	RL µg/L	Q	Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Acrylonitrile	U	2.0		105	100	105	66 - 135		103	2	20		MB-2	LCS-2	LCD-2
2. Benzene	U	1.0		93.0	100	93	70 - 130		99	6	20		MB-2	LCS-2	LCD-2
3. Bromobenzene	U	1.0		93.1	100	93	70 - 130		93	0	20		MB-2	LCS-2	LCD-2
4. Bromochloromethane	U	1.0		88.4	100	88	61 - 130		89	1	20		MB-2	LCS-2	LCD-2
5. Bromodichloromethane	U	1.0		97.8	100	98	70 - 130		95	3	20		MB-2	LCS-2	LCD-2
6. Bromoform	U	1.0		104	100	104	65 - 145		108	4	20		MB-2	LCS-2	LCD-2
7. Bromomethane	U	5.0		86.7	100	87	52 - 150		85	3	20		MB-2	LCS-2	LCD-2
8. 2-Butanone	U	25		85.5	100	86	59 - 130		93	8	20		MB-2	LCS-2	LCD-2
9. n-Butylbenzene	U	1.0		103	100	103	70 - 130		102	1	20		MB-2	LCS-2	LCD-2
10. sec-Butylbenzene	U	1.0		102	100	102	70 - 130		102	0	20		MB-2	LCS-2	LCD-2
11. tert-Butylbenzene	U	1.0		102	100	102	70 - 130		102	0	20		MB-2	LCS-2	LCD-2
12. Carbon Disulfide	U	5.0		78.3	100	78	70 - 130		78	0	20		MB-2	LCS-2	LCD-2
13. Carbon Tetrachloride	U	1.0		93.6	100	94	70 - 133		100	6	20		MB-2	LCS-2	LCD-2
14. Chlorobenzene	U	1.0		96.8	100	97	70 - 130		96	1	20		MB-2	LCS-2	LCD-2
15. Chloroethane	U	5.0		66.2	100	66	53 - 136		67	2	20		MB-2	LCS-2	LCD-2
16. Chloroform	U	1.0		94.4	100	94	78 - 121		91	3	20		MB-2	LCS-2	LCD-2
17. Chloromethane	U	5.0		62.0	100	62	50 - 148		62	0	20		MB-2	LCS-2	LCD-2
18. 2-Chlorotoluene	U	5.0		95.1	100	95	70 - 130		95	0	20		MB-2	LCS-2	LCD-2
19. Dibromochloromethane	U	5.0		107	100	107	70 - 130		103	4	20		MB-2	LCS-2	LCD-2
20. 1,2-Dibromo-3-chloropropane	U	1.0		101	100	101	70 - 137		100	1	20		MB-2	LCS-2	LCD-2
21. Dibromomethane	U	5.0		91.4	100	91	70 - 130		99	8	20		MB-2	LCS-2	LCD-2
22. 1,2-Dichlorobenzene	U	1.0		98.9	100	99	70 - 130		96	3	20		MB-2	LCS-2	LCD-2
23. 1,3-Dichlorobenzene	U	1.0		93.5	100	93	70 - 130		93	0	20		MB-2	LCS-2	LCD-2
24. 1,4-Dichlorobenzene	U	1.0		92.6	100	93	70 - 130		92	1	20		MB-2	LCS-2	LCD-2
25. 1,1-Dichloroethane	U	1.0		99.5	100	100	70 - 130		99	1	20		MB-2	LCS-2	LCD-2
26. 1,2-Dichloroethane	U	1.0		89.9	100	90	70 - 130		96	6	20		MB-2	LCS-2	LCD-2
27. 1,1-Dichloroethene	U	1.0		91.8	100	92	72 - 126		91	1	20		MB-2	LCS-2	LCD-2
28. cis-1,2-Dichloroethene	U	1.0		86.1	100	86	70 - 130		88	2	20		MB-2	LCS-2	LCD-2
29. trans-1,2-Dichloroethene	U	1.0		94.0	100	94	70 - 130		95	1	20		MB-2	LCS-2	LCD-2
30. 1,2-Dichloropropane	U	1.0		96.0	100	96	79 - 125		96	0	20		MB-2	LCS-2	LCD-2
31. cis-1,3-Dichloropropene	U	1.0		92.6	100	93	70 - 131		97	4	20		MB-2	LCS-2	LCD-2
32. trans-1,3-Dichloropropene	U	1.0		110	100	110	70 - 130		99	11	20		MB-2	LCS-2	LCD-2
33. Ethylbenzene	U	1.0		101	100	101	80 - 122		97	4	20		MB-2	LCS-2	LCD-2
34. Ethylene Dibromide	U	1.0		101	100	101	70 - 130		96	5	20		MB-2	LCS-2	LCD-2
35. 2-Hexanone	U	50		87.9	100	88	62 - 130		92	4	20		MB-2	LCS-2	LCD-2
36. Isopropylbenzene	U	5.0		103	100	103	70 - 130		116	12	20		MB-2	LCS-2	LCD-2
37. Methylene Chloride	U	5.0		91.1	100	91	63 - 150		91	0	20		MB-2	LCS-2	LCD-2
38. 2-Methylnaphthalene	U	5.0		107	100	107	50 - 149		106	1	20		MB-2	LCS-2	LCD-2
39. 4-Methyl-2-pentanone	U	50		112	100	112	67 - 134		100	11	20		MB-2	LCS-2	LCD-2
40. MTBE	U	5.0		99.8	100	100	70 - 130		101	1	20		MB-2	LCS-2	LCD-2
41. Naphthalene	U	5.0		99.6	100	100	70 - 130		105	5	20		MB-2	LCS-2	LCD-2
42. n-Propylbenzene	U	1.0		98.4	100	98	70 - 130		99	1	20		MB-2	LCS-2	LCD-2
43. Styrene	U	1.0		105	100	105	70 - 135		116	10	20		MB-2	LCS-2	LCD-2
44. 1,1,1,2-Tetrachloroethane	U	1.0		104	100	104	70 - 130		104	0	20		MB-2	LCS-2	LCD-2
45. 1,1,2,2-Tetrachloroethane	U	1.0		97.5	100	98	70 - 130		93	5	20		MB-2	LCS-2	LCD-2
46. Tetrachloroethene	U	1.0		101	100	101	70 - 130		98	3	20		MB-2	LCS-2	LCD-2
47. Toluene	U	1.0		93.2	100	93	80 - 120		93	0	20		MB-2	LCS-2	LCD-2
48. 1,2,4-Trichlorobenzene	U	5.0		90.8	100	91	70 - 130		103	12	20		MB-2	LCS-2	LCD-2
49. 1,1,1-Trichloroethane	U	1.0		96.7	100	97	70 - 130		91	6	20		MB-2	LCS-2	LCD-2
50. 1,1,2-Trichloroethane	U	1.0		102	100	102	70 - 130		98	4	20		MB-2	LCS-2	LCD-2
51. Trichloroethene	U	1.0		96.6	100	97	71 - 130		98	1	20		MB-2	LCS-2	LCD-2

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**Quality Control Report**  
**Preparation Batch QC Summary**  
**Gas Chromatography - Mass Spectrometry (Volatiles)**  
**Aqueous**

Batch ID: VB14J24B  
Page: 2 of 2  
Date: 12/03/14

Preparation Batch: VB14J24B      Preparation Date: 10/24/14

Parameter	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code			
	Result µg/L	RL µg/L	Q	Result µg/L	Spike µg/L	Rec. %	LCL - UCL %		Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
52. Trichlorofluoromethane	U	1.0		78.3	100	78	69 - 131			77	1	20		MB-2	LCS-2	LCD-2
53. 1,2,3-Trichloropropane	U	1.0		97.8	100	98	70 - 130			95	3	20		MB-2	LCS-2	LCD-2
54. 1,2,3-Trimethylbenzene	U	1.0		97.9	100	98	70 - 130			98	0	20		MB-2	LCS-2	LCD-2
55. 1,2,4-Trimethylbenzene	U	1.0		101	100	101	70 - 130			101	0	20		MB-2	LCS-2	LCD-2
56. 1,3,5-Trimethylbenzene	U	1.0		101	100	101	70 - 130			100	1	20		MB-2	LCS-2	LCD-2
57. m&p-Xylene	U	2.0		203	200	102	70 - 130			97	5	20		MB-2	LCS-2	LCD-2
58. o-Xylene	U	1.0		98.7	100	99	70 - 130			107	8	20		MB-2	LCS-2	LCD-2

System Monitoring Compounds (Surrogates):	Method Blank (MB)				Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result	Spike	Rec.		Result	Spike	Rec.	LCL - UCL		Rec.	RPD	UCL		MB	LCS	LCD
	µg/L	µg/L	%	Q	µg/L	µg/L	%	%	Q	%	%	%	Q			
1. Dibromofluoromethane(S)	51.5	50.0	103		47.0	50.0	94	80 - 120		93	1	20		MB-2	LCS-2	LCD-2
2. 1,2-Dichloroethane-d4(S)	46.4	50.0	93		45.4	50.0	91	80 - 120		97	6	20		MB-2	LCS-2	LCD-2
3. Toluene-d8(S)	50.6	50.0	101		48.7	50.0	93	80 - 122		98	5	20		MB-2	LCS-2	LCD-2
4. 4-Bromofluorobenzene(S)	47.5	50.0	95		49.4	50.0	99	80 - 120		112	12	20		MB-2	LCS-2	LCD-2

**Definitions/Qualifiers:**

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

**Run Code (Analysis Sequence/Run Time):**

MB-2 VB14J24B 10/25/14 03:32  
LCS-2 VB14J24B 10/25/14 02:12  
LCD-2 VB14J24B 10/25/14 02:39

**Exception Summary:**

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

**Report Generated By:**



**Anthony Donnelly**  
Information Technology Officer  
Wednesday, December 03, 2014  
4:28:42 PM

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**Quality Control Report**  
**Preparation Batch QC Summary**  
**Gas Chromatography - Mass Spectrometry (Volatiles)**  
**Aqueous**

Batch ID: VB14J27A  
Page: 1 of 1  
Date: 12/03/14

Preparation Batch: VB14J27A      Preparation Date: 10/27/14

Parameter	Method Blank (MB)				Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result µg/L	RL µg/L	Q		Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Acetone	U	50			86.2	100	86	50 - 136		92	7	20		MB-3	LCS-3	LCD-3
2. Dichlorodifluoromethane	U	5.0			136	100	136	70 - 139		122	11	20		MB-3	LCS-3	LCD-3
3. Vinyl Chloride	U	1.0			114	100	114	73 - 125		105	8	20		MB-3	LCS-3	LCD-3

System Monitoring Compounds (Surrogates):	Method Blank (MB)				Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result µg/L	Spike µg/L	Rec. %	Q	Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Dibromofluoromethane(S)	50.5	50.0	101		49.3	50.0	99	80 - 120		92	7	20		MB-3	LCS-3	LCD-3
2. 1,2-Dichloroethane-d4(S)	48.8	50.0	98		40.1	50.0	80	80 - 120		84	5	20		MB-3	LCS-3	LCD-3
3. Toluene-d8(S)	44.4	50.0	89		54.1	50.0	108	80 - 122		94	14	20		MB-3	LCS-3	LCD-3
4. 4-Bromofluorobenzene(S)	42.5	50.0	85		49.5	50.0	99	80 - 120		107	8	20		MB-3	LCS-3	LCD-3

**Definitions/Qualifiers:**

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

**Run Code (Analysis Sequence/Run Time):**

MB-3 VB14J27A 10/27/14 14:07  
LCS-3 VB14J27A 10/27/14 12:47  
LCD-3 VB14J27A 10/27/14 13:14

**Exception Summary:**

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

**Report Generated By:**



**Anthony Donnelly**  
Information Technology Officer  
Wednesday, December 03, 2014  
4:28:42 PM





Wednesday, November 12, 2014

Fibertec Project Number: 64820 Supplemental  
Project Identification: Barrels (P2316) /P2316  
Submittal Date: 10/15/2014

Dr. G. Nell Tyner  
Progressive Engineering & Construction, Inc.  
3912 W. Humphrey Street  
Tampa, FL 33614

Dear Dr. Tyner,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 14 days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read 'Daryl Strandbergh'.

Daryl P. Strandbergh  
Laboratory Director

DPS/dps

Enclosures

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Analytical Laboratory Report  
Laboratory Project Number: 64820  
Laboratory Sample Number: 64820-001

Order: 64820  
Page: 2 of 3  
Date: 11/12/14

Client Identification:	Progressive Engineering & Construction, Inc.	Sample Description:	Prebun	Chain of Custody:	
Client Project Name:	Barrels (P2316)	Sample No:	1	Collect Date:	10/15/14
Client Project No:	P2316	Sample Matrix:	Soil/Solid	Collect Time:	10:37
Sample Comments:	Soil results have been calculated and reported on a dry weight basis unless otherwise noted.				
Definitions:	Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.				

Trace Elements by ICP/MS (EPA 0200.2-M/EPA 6020A)

Alliquot ID: 64820-001B

Matrix: Soil/Solid

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Antimony	540		µg/kg	300	20	11/11/14	PT14K11E	11/12/14	T414K12A	JLH

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Definitions/Qualifiers:

- A: Spike recovery or precision unusable due to dilution.  
B: The analyte was detected in the associated method blank.  
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.  
J: The concentration is an estimated value.  
M: Modified Method  
U: The analyte was not detected at or above the reporting limit.  
X: Matrix Interference has resulted in a raised reporting limit or distorted result.  
W: Results reported on a wet-weight basis.  
\*: Value reported is outside QA limits

Exception Summary:



Accreditation Number(s):

**E-10395 (KS)**

**T104704518-13-1 (TX)**

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Chain of Custody #  
**136276**  
PAGE 2 of 5

Client Name: <u>Progressive Eng. + Const.</u>					PARAMETERS										Turnaround		Matrix Code		Deliverables	
Contact Person: <u>Nell Tyeer</u>															24 hour RUSH (surcharge applies)		<input checked="" type="checkbox"/> Soil		<input checked="" type="checkbox"/> GW Ground Water	
Project Name/ Number: <u>P2316 - Barrels</u>					48 hour RUSH (surcharge applies)		<input type="checkbox"/> Air		<input type="checkbox"/> SW Surface Water		<input type="checkbox"/> Level 3									
QUOTE#					72 hour RUSH (surcharge applies)		<input type="checkbox"/> Oil		<input type="checkbox"/> WW Waste Water		<input type="checkbox"/> Level 4									
Purchase Order#					<input checked="" type="checkbox"/> Standard (5-7 bus. days)		<input type="checkbox"/> Wipe		<input checked="" type="checkbox"/> Other: Specify		<input type="checkbox"/> EDD									
					Other: Specify						<input type="checkbox"/> FES Drilling Services									
					Remarks:															
Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)													
	10/5/14	1034		P2316 M.d - 01-02	S	1	N	1												
	10/5/14	1034		P2316 M.d - 01-04	S	1	N	1												
	10/5/14	1034		P2316 M.d - 01-06	S	1	N	1												
	10/5/14	1029		P2316 M.d - 02-02	S	1	N	1												
	10/5/14	1029		P2316 M.d - 02-04	S	1	N	1												
	10/5/14	1029		P2316 M.d - 02-06	S	1	N	1												
	10/5/14	1022		P2316 M.d - 03-02	S	1	N	1												
	10/5/14	1022		P2316 M.d - 03-04	S	1	N	1												
	10/5/14	1022		P2316 M.d - 04-02	S	1	N	1												
	10/5/14	1015		P2316 M.d - 04-04	S	1	N	1												
Comments:																				
Relinquished By: <u>[Signature]</u>					Date/ Time: <u>10/5/14</u>		Received By: <u>[Signature]</u>					12:30								
Relinquished By:					Date/ Time:		Received By:													
Relinquished By:					Date/ Time:		Received By Laboratory:													
LAB USE ONLY: Fibertec project number: Laboratory Tracking: Temperature at Receipt:																				

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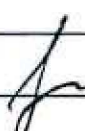
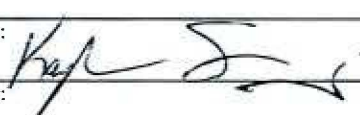
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Chain of Custody #  
**136277**  
PAGE 3 of 5

Client Name: <b>Progressive Eng. &amp; Const.</b>					MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)	PCB	PARAMETERS										Turnaround	Matrix Code	Deliverables
Contact Person: <b>Nell Tyner</b>									24 hour RUSH (surcharge applies)	<input type="checkbox"/> Soil	<input type="checkbox"/> GW Ground Water	<input type="checkbox"/> Level 2									
Project Name/ Number: <b>P2316 Barrels</b>									48 hour RUSH (surcharge applies)	<input type="checkbox"/> Air	<input type="checkbox"/> SW Surface Water	<input type="checkbox"/> Level 3									
QUOTE#									72 hour RUSH (surcharge applies)	<input type="checkbox"/> Oil	<input type="checkbox"/> WW Waste Water	<input type="checkbox"/> Level 4									
Purchase Order#					<input checked="" type="checkbox"/> Standard (5-7 bus. days)	<input type="checkbox"/> Wipe	<input type="checkbox"/> X Other: Specify									<input type="checkbox"/> EDD					
Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor												Other: Specify	<input type="checkbox"/> FES Drilling Services				
	10/15/14	1015		P2316 M.d 04 06	S	1	N	1								Remarks: <b>HOLD</b>					
	10/15/14	1010		- P2316 M.d 05 02	S	1	N	1													
	10/15/14	1010		- P2316 M.d 05 04	S	1	N	1													
	10/15/14	1010		P2316 M.d 05 06	S	1	N	1													
	10/15/14	1010 <sup>2</sup>		- P2316 M.d 06 02	S	1	N	1													
	10/15/14	1002		- P2316 M.d 06 04	S	1	N	1													
	10/15/14	1002		P2316 M.d 06 04	S	1	N	1													
	10/15/14	1002		P2316 M.d 06 06	S	1	N	1													
	10/15/14	957		P2316 M.d 07 02	S	1	N	1													
	10/15/14	957		P2316 M.d 07 04	S	1	N	1													
Comments:																					
Relinquished By: 					Date/ Time		10/15/14		Received By: 					12:30							
Relinquished By:					Date/ Time				Received By:												
Relinquished By:					Date/ Time				Received By Laboratory:												
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Chain of Custody #  
**136278**  
PAGE 4 of 5

Client Name: <u>Progressive Eng &amp; Const.</u>					PARAMETERS										Turnaround		Matrix Code		Deliverables	
Contact Person: <u>Nell Tyner</u>					<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">MATRIX (SEE RIGHT CORNER FOR CODE)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;"># OF CONTAINERS</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">PRESERVED (Y/N)</div> <div style="font-size: 2em; margin-left: 10px;">PCD</div> </div>										<input type="checkbox"/> 24 hour RUSH (surcharge applies) <input type="checkbox"/> 48 hour RUSH (surcharge applies) <input type="checkbox"/> 72 hour RUSH (surcharge applies) <input checked="" type="checkbox"/> Standard (5-7 bus. days) <input type="checkbox"/> Other: Specify _____		<input type="checkbox"/> S Soil <input type="checkbox"/> A Air <input checked="" type="checkbox"/> G Ground Water <input type="checkbox"/> P Wipe <input type="checkbox"/> X Other: Specify _____		<input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> EDD	
Project Name/ Number: <u>P2316 Barrels</u>															<input type="checkbox"/> FES Drilling Services					
QUOTE#															Remarks:					
Purchase Order#																				
Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor																
	10/5/14	957		P2316 M.d 0706	S	1	N	1												
	10/5/14	927		P2316 M.d 0802	S	1	N	1												
	10/15/14	927		P2316 M.d 0804	S	1	N	1												
	10/15/14	927		P2316 M.d 0806	S	1	N	1												
	10/15/14	911		P2316 M.d 0902	S	1	N	1												
	10/15/14	911		P2316 M.d 0904	S	1	N	1												
	10/15/14	911		P2316 M.d 0906	S	1	N	1												
	10/15/14	856		P2316 M.d 1002	S	1	N	1												
	10/15/14	858		P2316 M.d 1004	S	1	N	1												
	10/15/14	858		P2316 M.d 1006	S	1	N	1												
Comments:																				
Relinquished By: <u>[Signature]</u>					Date/Time: <u>10/5/14</u>					Received By: <u>Karl S. [Signature]</u> <u>10/15/14 12:30</u>										
Relinquished By:					Date/Time:					Received By:										
Relinquished By:					Date/Time:					Received By Laboratory:										
LAB USE ONLY: Fibertec project number: Laboratory Tracking: Temperature at Receipt:																				

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Phone: 231 775 8368  
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**Industrial Hygiene Services, Inc.**  
1914 Holloway Drive  
Holt, MI 48842  
Phone: 517 699 0345  
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email: asbestos@fibertec.us

**Geoprobe**  
11766 E. Grand River  
Brighton, MI 48116  
Phone: 810 220 3300  
Fax: 810 220 3311

Chain of Custody #  
**136279**  
PAGE 5 of 5

Client Name: <b>Progressive Eng &amp; Const</b>					MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)	PARAMETERS												Turnaround	Matrix Code	Deliverables		
Contact Person: <b>Nell Tyner</b>								PCB	S	I	N	I	S	I	N	I	S	I	N	I	24 hour RUSH (surcharge applies)	<input type="checkbox"/> Soil	<input type="checkbox"/> GW Ground Water	<input type="checkbox"/> Level 2
Project Name/ Number: <b>P2316 Barrels</b>																					48 hour RUSH (surcharge applies)	<input type="checkbox"/> Air	<input type="checkbox"/> SW Surface Water	<input type="checkbox"/> Level 3
QUOTE#																					72 hour RUSH (surcharge applies)	<input type="checkbox"/> Oil	<input type="checkbox"/> WW Waste Water	<input type="checkbox"/> Level 4
Purchase Order#																	<input checked="" type="checkbox"/> Standard (5-7 bus. days)	<input type="checkbox"/> P Wipe	<input checked="" type="checkbox"/> Other: Specify	<input type="checkbox"/> EDD				
																	Other: Specify		<input type="checkbox"/> FES Drilling Services					
Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor													Remarks:							
	10/15/14	927		P2316 Mid MSHSD1													<b>Hold</b> ↓							
	10/15/14	1010		P2316 Mid MSHSD2																				
	10/15/14	858		P2316 Mid Dup 01																				
	10/15/14	957		P2316 Mid Dup 02																				
	10/15/14	1015		P2316 Mid Dup 03																				
	10/15/14	1022		P2316 Mid Dup 04																				
Comments:																								
Relinquished By: <b>J</b>					Date/ Time: <b>10/15/14</b>		Received By: <b>Karl S...</b>												10/15/14 12:35					
Relinquished By:					Date/ Time:		Received By:																	
Relinquished By:					Date/ Time:		Received By Laboratory:																	
<b>LAB USE ONLY:</b> Fibertec project number: Laboratory Tracking: Temperature at Receipt:																								

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COC Revision: February, 2013

**RCV'D ON**  
**ICE**





Wednesday, November 19, 2014

Fibertec Project Number: 65299  
Project Identification: Barrels (P2316) /P2316  
Submittal Date: 11/13/2014

Dr. G. Nell Tyner  
Progressive Engineering & Construction, Inc.  
3912 W. Humphrey Street  
Tampa, FL 33614

Dear Dr. Tyner,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 14 days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl P. Strandbergh".

Daryl P. Strandbergh  
Laboratory Director

DPS/cdh

Enclosures

1914 Holloway Drive  
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F: (231) 775-8584



Analytical Laboratory Report  
Laboratory Project Number: 65299  
Laboratory Sample Number: 65299-001

Order: 65299  
Page: 2 of 3  
Date: 11/19/14

Client Identification:	Progressive Engineering & Construction, Inc.	Sample Description:	IDW Water	Chain of Custody:	138308
Client Project Name:	Barrels (P2316)	Sample No:	1	Collect Date:	11/13/14
Client Project No:	P2316	Sample Matrix:	Wastewater	Collect Time:	12:00

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) (EPA 0608)

Aliquot ID: 65299-001

Matrix: Wastewater

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
1. Aroclor-1016	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
2. Aroclor-1221	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
3. Aroclor-1232	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
4. Aroclor-1242	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
5. Aroclor-1248	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
6. Aroclor-1254	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
7. Aroclor-1260	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
‡ 8. Aroclor-1262	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC
‡ 9. Aroclor-1268	U		mg/L	0.00020	1.0	11/18/14	PS14K18B	11/18/14	SC14K18A	TMC

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F: (810) 220-3311  
F: (231) 775-8584

Definitions/Qualifiers:

- A: Spike recovery or precision unusable due to dilution.  
B: The analyte was detected in the associated method blank.  
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.  
J: The concentration is an estimated value.  
M: Modified Method  
U: The analyte was not detected at or above the reporting limit.  
X: Matrix Interference has resulted in a raised reporting limit or distorted result.  
W: Results reported on a wet-weight basis.  
\*: Value reported is outside QA limits

Exception Summary:



Accreditation Number(s):

**E-10395 (KS)**

**T104704518-13-1 (TX)**

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Quality Control Report  
Preparation Batch QC Summary  
Gas Chromatography - Electron Capture Detector  
Aqueous

Batch ID: PS14K18B  
Page: 1 of 1  
Date: 12/03/14

Preparation Batch: PS14K18B

Preparation Date: 11/18/14

Parameter	Method Blank (MB)				Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result	RL			Result	Spike	Rec.	LCL - UCL		Rec.	RPD	UCL		MB	LCS	LCD
	µg/L	µg/L	Q		µg/L	µg/L	%	%	Q	%	%	%	Q			
1. Aroclor-1016	U	0.20			1.96	2.00	98	50 - 104		103	5	30		MB-1	LCS-1	LCD-1
2. Aroclor-1260	U	0.20			2.00	2.00	100	39 - 121		102	2	30		MB-1	LCS-1	LCD-1

System Monitoring Compounds (Surrogates):	Method Blank (MB)				Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
	Result	Spike	Rec.		Result	Spike	Rec.	LCL - UCL		Rec.	RPD	UCL		MB	LCS	LCD
	µg/L	µg/L	%	Q	µg/L	µg/L	%	%	Q	%	%	%	Q			
1. Decachlorobiphenyl-PCB(S)	0.0674	0.1000	67		0.0822	0.1000	82	14 - 124		89	8	30		MB-1	LCS-1	LCD-1
2. 2,4,5,6-Tetrachloro-m-xylene-PCB(S)	0.0576	0.1000	58		0.0762	0.1000	76	26 - 136		75	1	30		MB-1	LCS-1	LCD-1

Definitions/Qualifiers:

U: The analyte was not detected at or above the Reporting Limit (RL).  
\*: Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-1 SC14K18A 11/18/14 19:36  
LCS-1 SC14K18A 11/18/14 20:08  
LCD-1 SC14K18A 11/18/14 20:40

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:



Anthony Donnelly  
Information Technology Officer  
Wednesday, December 03, 2014  
4:29:36 PM





**Analytical Laboratory**

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email: [asbestos@fibertec.us](mailto:asbestos@fibertec.us)

**Geoprabe**  
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Brighton, MI 48116  
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Chain of Custody #  
**138308**  
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## **APPENDIX D**

### **Data Validation Report**

## DATA VALIDATION SUMMARY

Laboratory:	Fibertec Environmental Services
Laboratory Project #:	P2316
Site:	Barrels, Inc. Site
Sampling Event:	October 14-15, 2014; November 13, 2014
Reviewer:	G. Nell Tyner, Ph.D., P.G.
Date:	December 10, 2014

A review was conducted of the data from samples collected at the Barrels, Inc. Site in Lansing, Michigan. Sampling was performed by Progressive Engineering field staff. The samples were analyzed by Fibertec Environmental Services. This review pertains to analysis of PCBs in soil by EPA 3546/EPA 8082A and analysis of metals by EPA 0200.2-M/EPA 6020A (except EPA 7471B for mercury), and volatile organic compounds (VOCs) by EPA 5035A/EPA 8260B in the waste samples, which were analyzed for disposal purposes.

The analyses were provided by the laboratory in several Quality Control Report Packages including those identified by the laboratory Sample Data Group (SDG) identification numbers 64683, 64820, and 65299. A Level II review was performed on the data, and evaluated for the following where applicable:

- Chain-of-Custody forms,
- Sample holding times,
- Field QA, including field blanks, and field duplicates,
- Laboratory QA, including method blanks, spikes, spike duplicates, laboratory control samples, and surrogate recoveries.

Soil samples were collected from three depths at 38 different sampling locations. Only the initial 0-2 and 2-4 ft bls samples were analyzed from the western set of samples, while the laboratory held the other samples pending completion of the analytical results. After the initial results were received, a second set of samples from the same depth intervals at three additional step out sampling points (from the middle of the railroad tracks) were analyzed to complete delineation of PCBs to the site-specific cleanup goals.

Overall data quality appears to be good. There were no data qualified for failure of QC samples. However, there were some deficiencies in the sample bottles delivered to the site by the laboratory that necessitated returning to the site to complete collection of samples for characterization of the investigation-derived waste, and there was some confusion upon laboratory sample check-in that required follow up to ensure that all parameters needed were analyzed. As a result, there are more QC packages than originally expected (for the number of samples analyzed) that had to be validated.

In addition, QC backup data had to be requested from the laboratory for all of the data packages as it was not initially provided as required in the purchase order scope of

work. Quality control summaries were provided for all data sets except for the separate run of the original samples collected for matrix spike/matrix spike duplicate (MS/MSD) analysis. Since these were QC samples themselves, this does not affect the data set.

#### SDG 64683

The report for the initial set of samples was dated October 22, 2014. Due to confusion by the laboratory the soil aliquots collected for the site-specific matrix spike (MS) and matrix spike duplicate (MSD) samples were run as regular samples instead of being used as QC spikes. This was corrected and the MS/MSDs were rerun and the results were reported on November 11, 2014.

Laboratory control sample (LCS) passed all criteria (percent recoveries and surrogate recoveries); LCS duplicate (LCSD) was not included; MS/MSD results passed criteria (% recovery and reproducibility); and method blank results were acceptable. No qualification of the data was necessary based upon acceptable QC results.

#### SDG 64820

This report is for the second set of soil samples analyzed ("Mid" samples), the (soil sample collected from the drill cuttings (labeled "preburn" sample), and the decontamination waste (labeled "wastewater") for purposes of characterizing the solid and liquid wastes for disposal.

Laboratory control sample (LCS) passed all criteria (percent recoveries and surrogate recoveries); LCS duplicate (LCSD) was not included; MS/MSD results passed criteria (% recovery and reproducibility); and method blank results were acceptable. No qualification of the data was necessary based upon acceptable QC results.

#### SDG 65299

This SDG included only the PCB analysis of the decontamination wastewater collected on November 13, 2014, from the waste drum staged at the site. All of the QC parameters met QC limits, so no data required qualification as a result.

#### Duplicates

Three sample duplicates were analyzed for PCBs with the first set of soil samples analyzed (West Dup 01, West Dup 02, and West Dup 03). In addition, aliquots of soil samples that were analyzed as MS/MSDs were also duplicate analyses from samples collected at West-03-04 and West-05-04. All of the duplicate samples and MS/MSD samples reported PCBs to all be non-detect. Therefore, the duplicate analyses met the reproducibility goals of the project.

The attached Table D-1 summarizes the data validation review.



Table D-1. Barrels, Inc. Site, Lansing, Michigan, Summary of Data Validation Review

SDG	Date of Lab Report	Parameters	Sample IDs	Holding Time	LCS Surrogate Recoveries	LCS (%Rec; %RPD)	MS/MSD	Method Blank	Chain-of-Custody	Date Sampled	Prep Batch	Analytical Batch	Data Qualifiers	Notes
64683	10/22/2014	PCBs	West-01-02	ok	ok	ok	ok	ok	136266	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-01-04	ok	ok	ok	ok	ok	136266	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-02-02	ok	ok	ok	ok	ok	136266	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-02-04	ok	ok	ok	ok	ok	136266	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-03-02	ok	ok	ok	ok	ok	136266	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-03-04	ok	ok	ok	ok	ok	136266	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-04-02	ok	ok	ok	ok	ok	136266	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-04-04	ok	ok	ok	ok	ok	136267	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-05-02	ok	ok	ok	ok	ok	136267	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-05-04	ok	ok	ok	ok	ok	136267	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-06-02	ok	ok	ok	ok	ok	136267	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-06-04	ok	ok	ok	ok	ok	136267	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-07-02	ok	ok	ok	ok	ok	136267	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-07-04	ok	ok	ok	ok	ok	136267	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-08-02	ok	ok	ok	ok	ok	136268	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-08-04	ok	ok	ok	ok	ok	136268	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-09-02	ok	ok	ok	ok	ok	136268	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-09-04	ok	ok	ok	ok	ok	136268	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-10-02	ok	ok	ok	ok	ok	136268	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-10-04	ok	ok	ok	ok	ok	136268	10/14/2014	PS14J16C	SB14J16A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-11-02	ok	ok	ok	ok	ok	136269	10/14/2014	PS14J17B	SB14J17A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-11-04	ok	ok	ok	ok	ok	136269	10/14/2014	PS14J17B	SB14J17A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-12-02	ok	ok	ok	ok	ok	136269	10/14/2014	PS14J17B	SB14J17A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-12-04	ok	ok	ok	ok	ok	136269	10/14/2014	PS14J17B	SB14J17A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-13-02	ok	ok	ok	ok	ok	136269	10/14/2014	PS14J17B	SB14J20A		Prep 10/17/14; Analyzed 10/20/14
		PCBs	West-13-04	ok	ok	ok	ok	ok	136269	10/14/2014	PS14J17B	SB14J17A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-14-02	ok	ok	ok	ok	ok	136269	10/14/2014	PS14J17B	SB14J20A		Prep 10/17/14; Analyzed 10/20/14
		PCBs	West-14-04	ok	ok	ok	ok	ok	136270	10/14/2014	PS14J17B	SB14J20A		Prep 10/17/14; Analyzed 10/20/14
		PCBs	West-Dup 01	ok	ok	ok	ok	ok	136274	10/14/2014	PS14J17B	SB14J17A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-Dup 02	ok	ok	ok	ok	ok	136274	10/14/2014	PS14J17B	SB14J17A		Prep 10/17/14; Analyzed 10/17/14
		PCBs	West-Dup 03	ok	ok	ok	ok	ok	136274	10/14/2014	PS14J17B	SB14J20A		Prep 10/17/14; Analyzed 10/20/14
64683	11/11/2014	PCBs	West MS/MSD1	ok	NA	ok	ok	ok	136274	10/14/2014	PS14J17B	SB14J20A		Prep 10/17/14; Analyzed 10/20/14
64683	11/11/2014	PCBs	West MS/MSD2	ok	NA	ok	ok	ok	136274	10/14/2014	PS14J17B	SB14J17A		Prep 10/17/14; Analyzed 10/17/14
64820	10/29/2014	PCBs	Mid-04-02	ok	ok	ok	ok*	ok	136276	10/15/2014	PS14J27F	SB14J27A		Prep 10/27/14; analyzed 10/27/14
		PCBs	Mid-04-04	ok	ok	ok	ok*	ok	136276	10/15/2014	PS14J27F	SB14J27A		Prep 10/27/14; analyzed 10/27/14
		PCBs	Mid-05-02	ok	ok	ok	ok*	ok	136277	10/15/2014	PS14J27F	SB14J27A		Prep 10/27/14; analyzed 10/27/14
		PCBs	Mid-05-04	ok	ok	ok	ok*	ok	136277	10/15/2014	PS14J27F	SB14J27A		Prep 10/27/14; analyzed 10/27/14
		PCBs	Mid-06-02	ok	ok	ok	ok*	ok	136277	10/15/2014	PS14J27F	SB14J27A		Prep 10/27/14; analyzed 10/27/14
		PCBs	Mid-06-04	ok	ok	ok	ok*	ok	136277	10/15/2014	PS14J27F	SB14J27A		Prep 10/27/14; analyzed 10/27/14
		PCBs	Preburn - Soil	ok	ok	ok	ok*	ok	136281	10/15/2014	PS14J27F	SB14J27A		Prep 10/27/14; analyzed 10/27/14
		VOCs	Preburn - Soil	ok	ok	ok	ok*	ok	136281	10/15/2014	VJ14J24B	VJ14J24B		Prep 10/24/14; analyzed 10/25/14
		Arsenic	Preburn - Soil	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27I	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Barium	Preburn - Soil	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27I	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Cadmium	Preburn - Soil	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27I	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Chromium	Preburn - Soil	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27I	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Lead	Preburn - Soil	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27I	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Selenium	Preburn - Soil	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27I	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Silver	Preburn - Soil	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27I	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Mercury	Preburn - Soil	ok	NA	ok	NR	ok	136281	10/15/2014	PM14J28A	M614J29A		Prep 10/29/14; analyzed 10/29/14
		Antimony	Preburn - Soil	ok	NA	ok	NR	ok	136281	10/15/2014	PT14K11E	T414K12A		Prep 11/11/14; analyzed 11/12/14
		VOCs	Wastewater	ok	ok	ok	ok*	ok	136281	10/15/2014	VB14J24B	VB14J24B		Prep 10/24/14; analyzed 10/25/14
		VOCs	Wastewater	ok	NP	NP	NP	NP	136281	10/15/2014	VB14J27A	VB14J27A		Prep 10/27/14; analyzed 10/27/14
														and VC and DCDFmethane only
64820	11/12/2014	Antimony	Wastewater	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27J	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Arsenic	Wastewater	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27J	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Barium	Wastewater	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27J	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Cadmium	Wastewater	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27J	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Chromium	Wastewater	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27J	T414J28A		Prep 10/27/14; analyzed 10/28/14

Table D-1. Barrels, Inc. Site, Lansing, Michigan, Summary of Data Validation Review

SDG	Date of Lab Report	Parameters	Sample IDs	Holding Time	LCS Surrogate Recoveries	LCS (%Rec; %RPD)	MS/MSD	Method Blank	Chain-of-Custody	Date Sampled	Prep Batch	Analytical Batch	Data Qualifiers	Notes
		Lead	Wastewater	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27J	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Selenium	Wastewater	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27J	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Silver	Wastewater	ok	NA	ok	NR	ok	136281	10/15/2014	PT14J27J	T414J28A		Prep 10/27/14; analyzed 10/28/14
		Mercury	Wastewater	ok	NA	ok	NR	ok	136281	10/15/2014	PM14J29A	M614J29B		Prep 10/29/14; analyzed 10/29/14
65299	11/19/2104	PCBs	Wastewater	ok	ok	ok	ok*	ok	138308	11/13/2014	PS14K18B	SC14K18A		Prep 11/18/14; analyzed 11/18/14
Notes:														
	*	LCS duplicate run in place of MSD.												
	NR	MS/MSDs results not reported for metals analyses.												
	NP	No QC package provided for VB14J27A.												